



# Virginia Wildlife

DECEMBER 1979

\$1.00

# Virginia Wildlife

VIRGINIA WILDLIFE (ISSN 0042 6792)  
December, 1979, Volume XL, No. 12

Dedicated to the Conservation of Virginia's  
Wildlife and Related Natural Resources

COMMONWEALTH OF VIRGINIA  
JOHN N. DALTON, GOVERNOR

Commission of Game and Inland Fisheries

## COMMISSIONERS

J.D. Bowie, Chairman, *Bristol*; Frank F. Everest, Jr., *Alexandria*; Dolph Hays, *Arlington*; Allan A. Hoffman, M.D., *Danville*; James R. Knight, Jr., D.D.S., *Warsaw*; Walter J. Leve-ridge, *Virginia Beach*; Richard T. Spain, Jr., *Waverly*; Richard E. Watkins, *Richmond*; Ralph L. Weaver, *Waynesboro*; George L. Sheppard, Jr., M.D., *Winchester*.

## ADMINISTRATIVE OFFICERS

James F. McInteer, Jr., *Executive Director*; Richard H. Cross, *Assistant Director*; John P. Randolph, *Deputy Assistant Director*; James Engle, *Deputy Assistant Director*; Jack W. Raybourne, *Chief, Game Division*; Harry L. Gillam, *Chief, Education Division*; Jack M. Hoffman, *Chief, Fish Division*; John H. McLaughlin, *Chief, Law Enforcement Division*; Larry Hart, *Chief, Lands and Engineering Division*; Sam J. Putt, *Chief, Administrative Services*.

*Virginia Wildlife* is published monthly in Richmond, Va. by the Commission of Game and Inland Fisheries, 4010 W. Broad St. All magazine subscriptions, changes of address and inquiries should be sent to PO Bx 11104, Richmond, Va. 23230. The editorial office gratefully receives for publication news items, articles, photographs and sketches of good quality which deal with Virginia's soil, water, forests and wildlife. The Commission assumes no responsibility for unsolicited manuscripts and illustrative material. Credit is given on material published. Permission to reprint text material is granted provided credit is given the Virginia Commission of Game and Inland Fisheries and *Virginia Wildlife*, but clearance should also be obtained from contributing free-lance writers, artists and photographers to reproduce their work.

**SUBSCRIPTIONS:** One year, \$5, three years, \$12.50. Make check or money order payable to Treasurer of Virginia and send to: Commission of Game and Inland Fisheries, P.O. Box 11104, Richmond, Virginia, 23230.

Observations, conclusions and opinions expressed in *Virginia Wildlife* are those of the authors and do not necessarily reflect those of the members or staff of the Commission of Game and Inland Fisheries.

Special Second Class Postage paid in Richmond, Va.

## Features

- 4 THE TALE OF COLD DUCK, by Carl O. Bolton  
*One Hound Who Just Didn't Give Up*
- 7 BEFORE THE HOOK, by Jeffery Fisher  
*Some Facts You Probably Don't Know about Fishing*
- 8 THE BUDGET CRUNCH, by Jack Randolph  
*A Hard Look at Some Unpleasant Facts*
- 10 THE BLINDS AT BACK BAY, by Gerald Almy  
*Great Hunting Available to Just About Everyone*
- 14 JACKSON RIVER FAREWELL, by Bob Gooch  
*Memories of a Once-Great River*
- 16 WALLEYE BONANZA, by Charlie Sledd  
*Good Fishing for Those Who Go After It*
- 18 WILDLIFE ART OF DUANE RAVER  
*Current Work of a Long-Respected Wildlife Artist*
- 20 CHRISTMAS CRAFTS, by Jeanne Price  
*Make a Christmas Tree for the Birds*
- 26 IMPRESSIONS OF ASSATEAGUE, by Bob Deans  
*A Look at One of Virginia's Most Beautiful Spots*
- 32 GOURMET GAME, PART III  
*Venison Makes a Great Holiday Treat*
- 35 1979 INDEX

## Departments

- 3 Editorial/Letters
- 22 Personalities
- 23 Growing Up
- 24 It Appears to Me
- 29 Outdoor Notebook

## Staff

HARRY L. GILLAM, Editor  
MEL WHITE, Associate Editor  
SANDRA COLEMAN, Assistant Editor  
ROBIN SHARPE, Art Director  
CARL "SPIKE" KNUTH, Artist and Photographer  
F.N. SATTERLEE and J.N. KERRICK, Staff Writers  
JO ANN AGEE, Photo-type Composition

COVER: Mallards by Durant Ball, Newport News



# Letters

## EARLY SEASON CONTROVERSY

Regarding "Early Season" that appeared in your October issue by Bob Hicks: I, too, went duck hunting during the early season, but my experiences weren't nearly so pleasant. I found that my time and money were wasted. The five day early season eliminates the December dates from the first through the seventeenth that are so productive for duck hunters. The January season is so prone to bad weather that it is frequently a waste of time. In three out of the four past Januarys, our marsh has been iced up so much that we lost an average of about 15 days of hunting. Thus, for five days of early season we give up 16 days in December, and possibly the same amount in January. I am not the only hunter to feel this way. I have heard many complain about the same thing.

Thomas B. Glasscock  
Middleburg

Thanks for your comments. We've found in the past that you can never please everyone!—Editor

## CB CHANNEL 9

I was very interested to see the announcement and explanation of Operation RESPECT in your October issue. I would like to let people know that I will use CB Channel 9 to report wildlife violations. Is there anyway to let people know that you are in support of both Operation RESPECT and CB Channel 9?

Walter Bilee  
Roanoke

We have available now a bumper sticker saying: "I Report Wildlife Violations" with our CB Channel 9 logo. Also, we have a card for you to carry with you that will remind you of just what to look for and to tell the warden exactly what you have seen when you are the witness of a game law violation. You can get both either from your local game warden or by writing to: Bumper Stickers, P.O. Box 11104, Richmond, Va., 23230.—Editor

## MICHIGAN FAN

I think your magazine is great and the photographs are super. I have been a nature writer for the Kalamazoo Gazette for 28 years and I wouldn't be without your magazine.

Gladys A. Hall  
Kalamazoo, Michigan

Thanks for the kind word. We're always delighted to hear that people from out-of-state enjoy our magazine.—Asst. Editor

# Editorial

## GENETIC SPIKES AND OTHER FAIRY TALES

A few months back I was handed an outdoor column in which columnist John Wooten made quite a case for deterioration of quality in our deer herds. He proposed a creature called a genetic spike buck which supposedly had high survival due to its puny rack. Spurned by trophy hunters and masquerading as a doe much of the time, this subversive creature is supposedly quietly infiltrating our deer herds and displacing the heavy-racked bucks of the past.

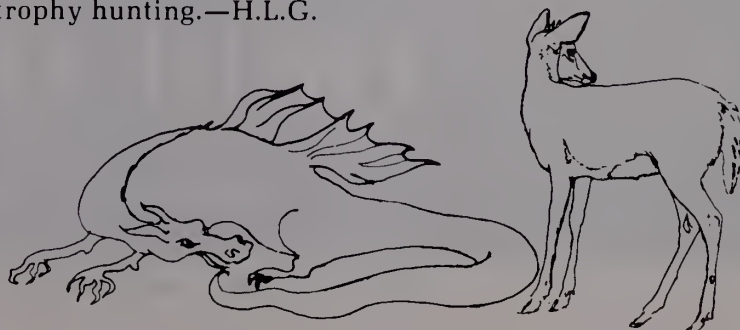
While it is true, and Wooten agrees, that heavy cropping of a deer herd reduces the number of old deer who would be expected to bear trophy racks, he maintains there aren't even enough decent bucks left for breeding, letting this job fall to the sneaky little spikes who have been hiding with the does.

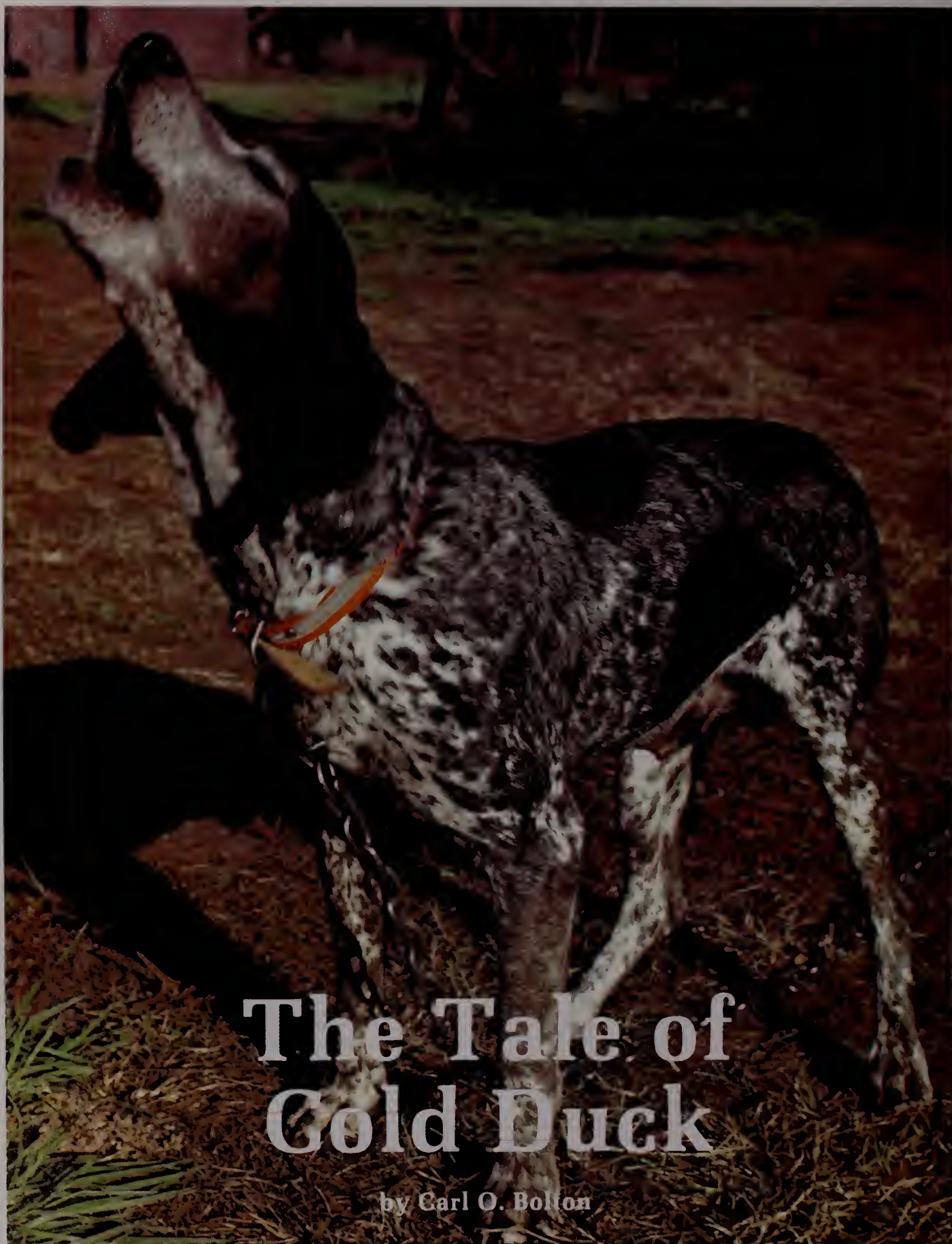
Such a scapegoat is handy but not easily defensible in light of nutritional research. A yearling with tiny spike antlers later became "Old January," a prime buck who grew to 300 pounds and sported 12 point antlers at Penn State University's animal nutrition research center. Dr. Robert Cowan of Penn State further reports: "of the hundreds of bucks passing through our deer research facility from all parts of Pennsylvania we have yet to see any evidence of a genetic spike." He further states that birth dates may be important along with food in determining whether a yearling will be a spike or not. Late born fawns tend to be undersized during their first winter and must utilize most of the second summer's browse for body growth. Over-population and stress tend to encourage late birth of fawns.

Nutrition has long been recognized as a factor in antler growth. Food goes first to body development and lastly to antlers. Body size may be as important as antler size in winning rutting season battles. Put on good rations later, however, under-nourished deer are able to grow normal antlers. These several avenues of study tend to point back to nutrition as the main cause of spike antlers. In most cases, shooting does, not spikes, is the solution.

Virginia's "bucks with antlers visible above the hair" law gives no protection to spikes as do some states forked antler requirements. With spike antlers being harder to see than forked ones, spikes naturally are passed by more often than bucks with forked antlers. However, a large number are taken during either sex seasons now held in most Virginia counties.

An ongoing survey shows that something less than half of Virginia's yearling bucks bear spikes. This percentage is higher in areas considered poor range. Furthermore, they seem to be fairly consistent over time indicating that spike bucks are not some sinister mutation threatening to wipe out trophy hunting.—H.L.G.





# The Tale of Gold Duck

by Carl O. Bolton

*A good dog can make or break a deer hunt in Eastern Virginia.*

VIRGINIA WILDLIFE



Lean rawboned hounds of all sizes go well with deer hunters in many areas, and especially in the southeastern section of Virginia. Stories of good deer chasing dogs are swapped back and forth over hundreds of crackling fires and pot bellied stoves in shacks wherever the use of dogs are permitted.

The saga of Cold Duck, a big hound that was used to sleeping in a coal bin before being bought by a couple of Old Dominion hunters, will live for a long time around the story telling areas of southeast Virginia.

There is no greater thrill to one who loves wildness, than to see a buck with white flag showing, letting all the world know that even in flight, he is still king of his wild habitat. Nothing, that is, unless in the distance one can hear the musical sound of a hunting dog, unhurried, as he patiently closes the gap between him and his quarry.

Charlie Roler and I hunted with the Owen Hunt Club, Stoney Creek. It is in Sussex county, just south of Petersburg. During the 1977 hunting season, there were 1487 deer taken in this one county alone. Bucks and does were both legal when we were there. Bucks killed outnumbered does by two to one.

The terrain features lots of forested lands, with many swampy areas. Peanuts are grown, and their abundance makes for fat and sassy deer, along with many other types of browse plants.

A typical day for a Virginia deer hunt begins well before dawn for those who are responsible for the dogs. On this hunt, I witnessed the complete dedication of a big hound named Cold Duck.

The dog would not quit running, even though it was pouring rain, and all the hunters except three, and the other dogs had long since gone to the hunting lodge to get dried out on that wet November day.

Steve Owens goes with the dogs on most of the hunts. He walks, and runs, always making lots of noise in order to get the deer moving. He estimates that he walks

perhaps over a hundred miles in a hunting season.

I asked this veteran hunter about the art of hunting deer with dogs. He had this to say: "It is not necessary to have a great many hunters to have a good hunt. Of course, we can hunt a bigger area with more hunters. One important thing," he continued, "when we put a hunter on a stand, we want him to stay there. If he leaves, deer may get through, and besides we need him to catch the dogs to keep them from going into areas not being hunted."



"Many times, hunters do move from the stands we put them on, only to regret it later, when they look back and see a buck high-tailing it right by the place they had just left," said Steve.

According to this expert, one pack of dogs ranging from three to six is enough for a small party of hunters. "In larger woods, the use of two or more packs are necessary. The average size for a pack of hounds per hunt is five to ten," he continued.

In Owen's opinion, it is virtually impossible to overhunt such good habitats as are found in Sussex County. Most of the woodlands are close by swampy areas, with many of them having swamps right in their middle. Hunters alone would have a difficult time moving deer from such places. In fact, it takes good dogs to turn the trick.

The Owen Club will hunt one boundary, perhaps two if small, in the morning, then the same pattern is followed in the afternoon. Hunted areas are then left to "rest," to be hunted again at a later date.

When Charlie and I hunted with the club in November, 1977, several deer were taken on the first two days. On Wednesday, the clouds were hanging moodily over the woods and peanut fields. It did not look like a good day for Virginia white-tailed deer.

However, the weather made no difference in our attitude, and we soon were on our stands. Then the rains came. Not gully washers, but enough to be unpleasant. I huddled under a cedar tree, straining to catch the sound of baying dogs. They never came, but I did hear one lone shotgun blast about 8:30. Then nothing but more rain. I wondered about the shot.

Lee Allen came for me about nine o'clock, and while driving alongside a peanut field, we saw a small buck tearing from the woods, some 500 yards away. He crossed the road before we got there, and we stopped to find out what was going on in the woods.

Then we heard the unmistakable sounds that only a hound in hot pursuit of game can make. We hoped it was a deer, but our hopes were dashed when big "Zero" Clayton Owen, one of the owners of Cold Duck said: "That dog is in there chasing a fox. He ain't got sense enough to quit and get out of the rain! No sensible deer would be out in all that." Little did he know he had misjudged the big hound so much!

We soon dried out, and after eating a sandwich, we were enjoying the warmth of the fire when one of the C.B. units crackled. It was Curt Owen, the other owner of Cold Duck. He was excited as he blurted into the mike, "Come on down here and help us get a buck out — Steve got a big one, and it will take lots of help."

I grabbed my cameras and we drove to where we found Curt, with the motor of his pick-up already running. He drove perhaps a mile, then we walked perhaps a



Photo by Irene Vandermolen

half mile further toward the big swamp. There we found a grinning Steve Owen resting beside a beautiful buck, with Cold Duck resting his head across the deer's neck. Steve told us the story.

"Luther Allen was standing in the woods in all that rain, when he felt as if something was behind him. He sneaked a look over his shoulder and there stood this huge

buck. He got one quick shot (the one I had heard that morning), but the buck was gone," said Steve.

Curt also got a glimpse of the buck as he roared through the forest. "He looked big as a moose," was the way Curt described the deer. Steve, Curt, and Mac Dunn decided to take stands.

Steve continued. "I could hear the chase going in and out of the

swamp." The hunters settled down for the long wait in the cold rain. Cold Duck kept at the job he knew so well.

He was not to be denied. It seemed hours later, when Steve heard the chase getting closer. He decided to move to a spot nearer the edge of the swamp. He waited, tense as a deer hunter can get when the dogs get near.

His hunch paid off. "All at once there he was, his huge set of antlers shining in the rain. All I could see was horns, and he was coming straight at me. I dropped him with two rounds of 00 buck from my double," said a happy, tired, wet Steve Owen.

Steve continued to praise the work of Cold Duck. "When the dog came out of the swamp and saw the deer, he began biting it. Then he realized the deer was dead, and he began licking the blood from the deer's face. He then draped his neck across the buck's head and neck, and he then went sound asleep. That dog had been running that buck for over four hours. He is some kind of dog."

It took several hunters to drag the deer to the truck. Cold Duck would not leave its side. He either walked closely beside, or directly behind it. The big brown and white dog gave a good example of complete dedication to this training. He won the admiration of every hunter there. Later, too, the conversation always turned to Cold Duck. "Zero" and Curt Owen figured the 80 bucks they paid for him the best money they every spent.

On Friday it was Curt who downed the best buck of the day. The dogs of Mac Dunn had chased it to a small lake where Curt was waiting. It was a trophy of which any hunter would have been proud.

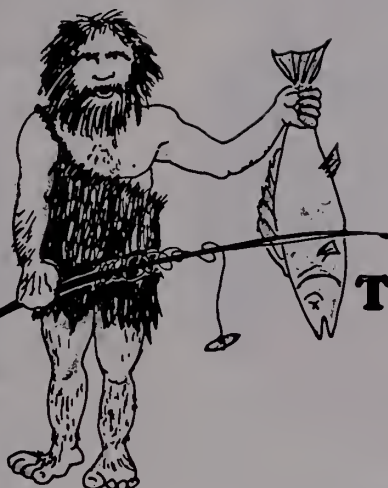
This one had to be brought out by boat. A young hunter looking like "Grizzly" Adams soon had Curt, Mac Dunn, the dog and the big buck aboard, and as they neared shore, it was apparent it, too, was a dandy.

I expect to hear more about the day Cold Duck simply would not stop, even though most of the group had quit long before.



# Before The Hook

by Jeffrey Fisher



**This “pre-hook”  
device led the  
way to modern  
sport fishing.**

It's early morning and you can't sleep. The anticipation of the first fishing trip of the year is well known, but you never tire of it. You really won't be happy until your line is in the water. Morning preliminaries take less time this morning than on workdays. You grab your gear and go.

Your gear includes a mass of tangled and gnarled heavy spider webs or Luffa gourds, a stout unbending four foot sapling and a short line made of thin, but strong vine. Your bait includes a crock of fish guts or chopped sea urchins.

What's this? It doesn't sound like any fishing trip you're familiar with. Well it isn't, exactly. It's 100 B.C. and your rig is called the entangling bob.

If you tried the rig, you would have to master the act of quickly lifting the fish out of the water with his teeth entangled in the bob before he could wiggle loose.

You're thinking this won't do! You lose too many fish. Those you do land are not much bigger than minnows. You feel the technique wanting but there are not too many fishing alternatives at this time.

Don't despair! about this time you get word that a new revolutionary idea is being used in the next village. It replaces the short line and the unyielding pole. It does away with the “bob.” Most of all, it permits you to bring home the big ones.

The gorge is born!

The gorge is more than an invention to overcome the shortcomings of the entangling bob. While it is line fishing without a hooking device, it represents one of those important transitions in man's development. Like the invention of the wheel for the transportation industry, with the advent of the integrated circuit in electronics or the discovery of mammalian immune systems in medicine, the gorge is of equal importance in sport fishing, an industry in which approximately 64 million U.S. anglers pay \$160 million just on licenses and fees.

The gorge is nothing less than the precursor of the hook. To the biologist, we were already in the

recent Cenozoic era. To the anthropologist, the Neolithic cultural period was well underway. From the point of view of the sportfisherman, this time has to be called the “pre-hook age.” But what is a gorge and how does it look?

The gorge is nothing more than a smooth, cylindrical double tapered piece of wood. Later models included the use of metal.

The fishing line is tied to the middle section of the gorge. The tie is made off-center to create two uneven lengths. To bait, the gorge is turned to parallel the line, with the short end leading and the long end touching the line. The gorge is then threaded, short end first, into a bait fish, eel, squid or even large worm. (Sound like a hook!) You must permit the fish to swallow the baited gorge. When you apply pulling pressure, the short end comes around, resulting in the gorge becoming perpendicular to the line. This action implants the gorge into the fish's belly or throat.

Use a strong, lightweight handline from a boat, pier, jetty or beach. Of course, during the glory years of the gorge, it was used only from boat or beach! If you use a large gorge (up to twelve inches), anchor the free end of the handline and be prepared for the struggle of your life.

If those in your village currently fish with line that stretches and is invisible in the water, with a sapling that is made of glass and bends to the shape of a horseshoe, with a line container that looks like a small drum with handle and trimmed in silver or gold, and with a sharp, shiny piece of hooked metal (that is strangely reminiscent of the gorge), then you probably wouldn't use a gorge.

However, you might want to take a minute and reflect on the contrasts between the equipment used by the men in your village and the gorge used by men in the past. It's also sobering to think that the basic technological principle of our sport — to hook a fish — hasn't changed all that much in many, many centuries.

# The Budget Crunch

by Jack Randolph

Low cost hunting and fishing licenses are a bargain we can no longer afford.

Do you remember when your hunting license cost \$3.00 and a duck stamp cost \$1.00? Perhaps you can remember when a box of shells brought only ninety cents?

Today, a hunting license costs \$5.00 and a duck stamp runs \$7.50. The cost of the present hunting license is now far less than the cost of a good box of shells.

Of course, we could wish for those "good old days," but wishing seldom does much good. When you consider that the annual deer harvest has increased a hundred fold, from seven hundred in 1924 to over seventy thousand now and that our turkey harvest has jumped five fold, from two thousand in 1951 to nearly ten thousand per year now, the good old days don't look all that good.

From a hunting license standpoint, the difference so far has been only \$2.00, but the difference in the quality of our hunting has been much more profound! Perhaps we are now living in the "good old days!"

Fishermen also have realized more returns for their license dollars since the day of the \$3.00 license. Their dollars, aided by matching federal funds gleaned from taxes on fishing tackle, have stocked and developed viable sport fisheries in large reservoirs across the Commonwealth. They have built numerous Game Commission lakes throughout the state and have introduced exciting fishing for such exotic species as striped bass, muskies and walleyes.

Operating with one of the most modest hunting, fishing and boat registration fee structures in the nation, the Commission offers protection to all wildlife within the Commonwealth. It has expanded its Wildlife Management Areas to the present 172,000 acres, offering habitat for hundreds of non-game species of wildlife as well as for those species popular with sportsmen. It has constructed 136 boat ramps on our inland and coastal waters and it maintains a program of fish and wildlife investigations second to none.

In addition to managing the fish and game resources of the Commonwealth, the Game Commission has the responsibility of looking after the hundreds of species of mammals, song birds, birds of prey, even mollusks and other wild living creatures, known collectively either as "non-game" or "endangered" species. Since sportsmen provide all of the funds for the operation of the Commission, this protection

of non-game and endangered species is given to the citizens of the Commonwealth as a gift, bought and paid for by the State's hunters, fishermen and trappers.

Inasmuch as the Commission is solely dependent upon hunting, fishing, trapping and boat registration fees, coupled with Federal Aid funds obtained through excise taxes on hunting and fishing equipment for its operation, it is correct to say that the sportsmen of Virginia provide the funds and resources for the protection and well being of *all* wildlife and inland fish in the Commonwealth. Not one red cent is contributed by the tax dollar.

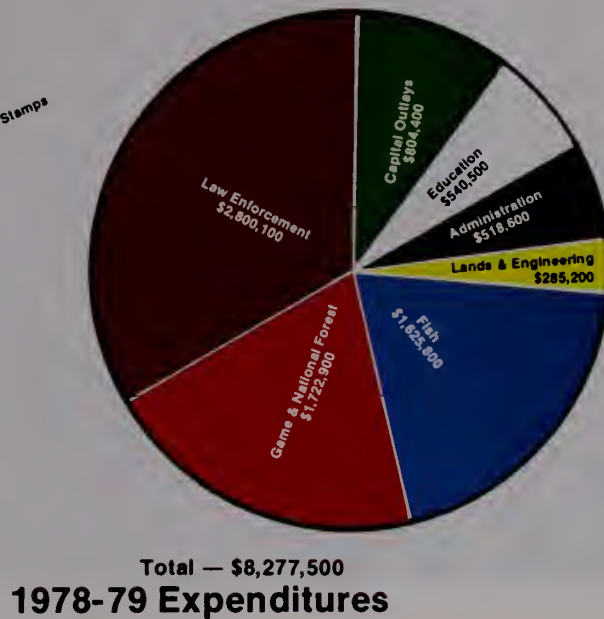
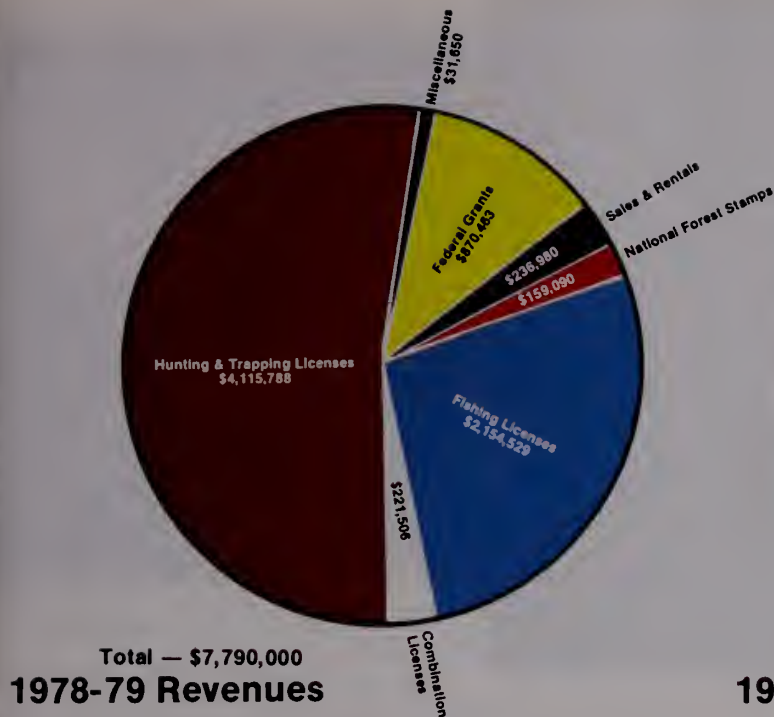
The license fees obtained from Virginia sportsmen are held in a special fund, protected by law and dedicated to fish and wildlife programs. Through the use of this special fund, Virginians are assured of the availability of the necessary resource to support wildlife programs. Consequently, the Commonwealth's ability to look after her fish and wildlife resources has been much more effective than similar Federal programs that should support wildlife on federally-owned lands. Historically, federal appropriations to support federal wildlife programs have received very low priorities and invariably have been inadequately funded.

Virginia's sportsmen are to be commended for their willingness to shoulder this burden themselves, rather than look to other taxpayers to help do the job. They know full well that if forced to compete for tax dollars against the pressing social issues of the day such as welfare and corrections, wildlife would come out second best.

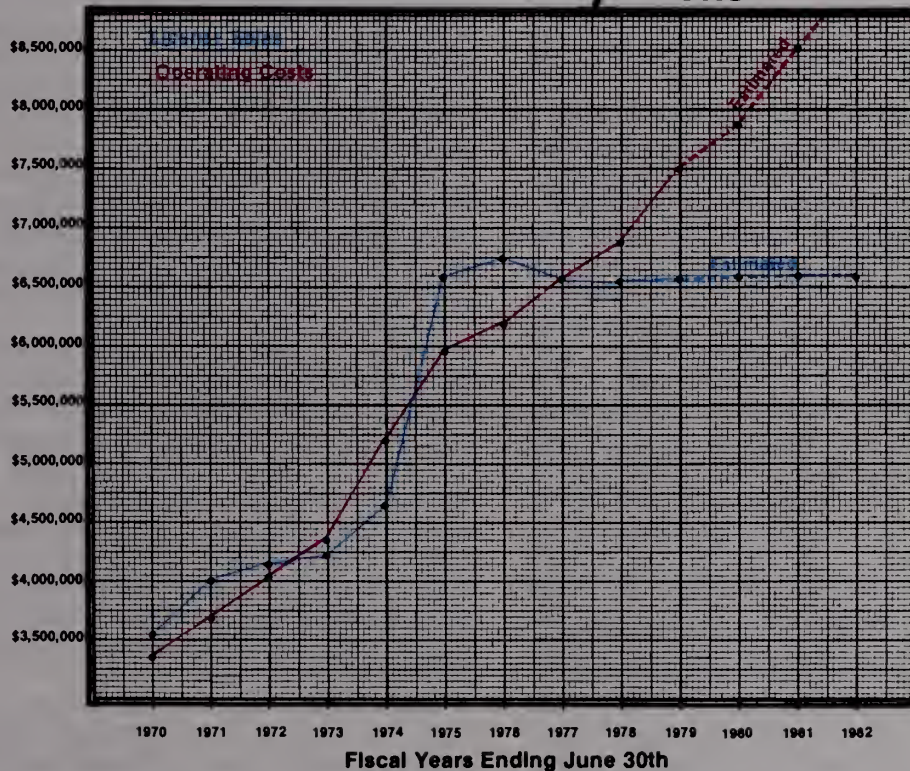
A problem inherent to funding wildlife programs with license fees is that the Game Commission must operate on what must be termed as a fixed income. The number of hunters and anglers in Virginia has levelled off at approximately 410 thousand hunters and 380 thousand fishermen. Although the population of Virginia is growing rapidly, the number of participants in hunting and fishing no longer is growing in proportion to the increase in population. This means that the Game Commission's income also has levelled off while the costs of operations increase and the scope of the Commission's operation expands. Inflation itself increases taxes, but in the case of our fish and wildlife programs, inflation adds only to our expenses not to our income.

The only acceptable method of increasing revenues





### Cost-Revenue Projections



is to increase license fees. As it stands today, Virginia offers both resident and nonresident sportsmen the lowest priced licenses of most Eastern states.

For example, to hunt both big game and small game with either conventional arms, bow and arrow or muzzle-loader on open lands and on our Wildlife Management Areas and to fish for all species except trout, the sportsman in Virginia spends \$15.00 in license fees. The same privilege in New Jersey costs a resident \$35.75; North Carolina \$31.50; Kentucky \$29.00; Florida \$53.25; New York

\$24.00; Pennsylvania \$22.70; Georgia \$21.00 and Tennessee \$23.50. If Virginia's license fees were raised by half, to \$7.50 per license, we would still be charging our residents less than all but one of the aforementioned states!

With rising costs of gasoline, salaries and everything connected with the operation of an organization the size of the Game Commission, management is faced with the same decision that confronts all managers in the present day world. Do we curtail services or do we increase revenues?



“Good news,” guide Bernie Hayes called out, interrupting our dreamy reverie before the roaring fire in the clubhouse. “You drew No. 2 blind. Eighteen ducks killed out of that blind yesterday.”

The moment had arrived. All five parties signed up for the waterfowl hunts on Back Bay had shown up by the 6:30 a.m. cut-off time and Otto Halstead had drawn straws for the assignment of blinds. We missed drawing Blind No. 1, which had made the best showing the day before, with a limit of 30 ten-point ducks for the three-man party, but neither Hank Burchard, Angus Phillips, nor myself were complaining about our luck. A dozen and a half ducks in the bag makes for a lot of shooting.

Forcibly we extracted ourselves from the mesmerizing grasp of the warm flames in the fireplace and piled our gear into the broad-beamed johnboat. The hush of morning was broken with the din of five revving Johnson 25's, chattering hunters, and stacks of decoys rattling in the aluminum boats.

John, Bernie Hayes' young Labrador, squatted patiently at his master's side as we lurched into the cold December air and motored towards our blind on the western shore of the huge brackish sound. A southwest wind that would mount to 30 mph before the day's end blew a cold, wet spray in our faces, slapping any lingering traces of sleep out of us in brisk fashion.

Sun-painted patches of pink splashed through the heavy gray clouds hanging low on the eastern horizon; otherwise, the day was but a promise. The moon beamed down brightly and waterfowl tracked across the blue-black skies in all directions as we moved through the marsh.

By the time Bernie throttled down the outboard and eased the boat into a protected corner of the bay, our adrenalin had neared the bursting point. Yet another large raft of ducks — pintails and gad-

walls — rose up and circled high overhead as we stepped off the bow into the sturdy reed-covered blind. While we settled back on the bench seats and stacked our ammo on the shelves, Hayes spread 30 duck and 10 goose decoys on the water.

The silence of the marsh resumed its claim over the morning.

Even before the last of the decoys were set, a pair of pintails came gliding in low over the reeds, catching all three of us by surprise. Our guns lay silent as the birds ghosted overhead, white and black forms silhouetted against a now-brightening sun.

Duck fever.

Chiding ourselves for such a slow-fingered response, we renewed our watch with vigor. Our wait was a short one. Within minutes after guide and dog joined us in the blind the flock of gadwalls that we'd pushed out came wheeling back towards their chosen resting spot. Hayes called loudly to the suspicious ducks, using only his mouth. The birds drifted close. Three guns bellowed simultaneously and the first waterfowl of the day splashed onto the wind-ruffled waters of back Bay. John splashed eagerly into the cold marsh to retrieve the quarry, and the hunt was on.

While it was not to turn out to be one of Back Bay's most spectacular displays of waterfowl hunting — partially due, no doubt, to a bright moonlit night and azure skies throughout the bulk of the day — action did come regularly enough to blacken the insides of our barrels by the day's end.

The flock of 20-odd gadwalls continued to return every so often, allowing us to poke a shot or two and garner several birds for the larder. There were more pintails, two drakes and a hen that came to our bag. A ruddy duck fell. One coot dropped to Hank's gun even as he lectured us on their supreme gastronomical qualities. A brace of colorful greenwinged teal succumbed to Angus' 12 gauge pump. And finally, a





*Dawn and decoys at Back Bay (left) A hunter rises in the blind for the morning's first shot. (above)*

# The Blinds at Back Bay

by Gerald Almy

The average sportsman can get a lot of ducks for the money at these public blinds.

pair of mallards flew by from which we plucked the drake. Six different species were in the bag at the day's end, even though shooting had only been "fair" by Back Bay standards.

Besides these birds that flew within gun range, there were hundreds of wigeon and black ducks and teal that traded across the blue December skies; protected canvasbacks that flocked into view; snow geese and Canadas that rose from the water and floated through the air, seemingly in slow motion. They were too far to shoot, but not so far that they didn't send chills of delight down our spines.

One of the traditional joys of waterfowling, of course, is bird watching as much as bird shooting. We had sufficient quantities of both occupations to fill our game bags and our aesthetic sensibilities on this day in the blind.

Now if you think this hunt occurred in the confines of some exclusive private duck club for the Parker-toting gun set, you're dead wrong. Our hunt took place on a public waterfowl management area in Virginia, at a cost of less than \$14 per hunter. The package included a rustic lodge with a roaring fire to start the day, the use of two blinds, 40 decoys, boat, safety equipment, a crackerjack guide, and, in this case, a fine retriever.

Traditional waterfowling over prime hunting grounds must rank as one of the most intriguing of outdoor sports. Spreading out decoys in just the precise layout needed to attract the wary wildfowl; hunkering down cryptically in a blind that blends smoothly into the bullrushes; imitating the call of the strong-winged birds as they trade across winter skies; praying and hoping that they will turn and look at your spread, wheel overhead and pitch into the stool. These are the roles the waterfowler enacts in a sport that is part hunting, part birding, part theatre.

But it is a brand of hunting that is difficult and

often prohibitively expensive for the novice to break into. Many of the prime waterfowling marshes of the East are locked up in exclusive private duck clubs for the rich. Those which aren't are in the hands of private guides who often must charge an arm and a leg for a day's hunt, due to the seasonal nature of their work.

For the mid-Atlantic hunter, though, there is an alternative — Back Bay. Nestled in the extreme southeastern corner of the Old Dominion, 20 miles south of bustling Virginia Beach, Back Bay is an anomaly in today's world of tight-fisted, private club waterfowling. And a very pleasant one!

We have the best public blinds in the state," boasts a justly-proud Otto Halstead, Game Management District supervisor, and the man in charge of Back Bay hunting. Few who have tried the sport would dispute his claim.

Three waterfowl management areas are operated by the Virginia Game Commission on the 25,000 acre lake — Pocahontas, Trojan, and Barbour's Hill. All offer public duck shooting at prices even the impecunious can afford.

The 737 acre Pocahontas Area, where Hank, Angus, and I shared a blind this past season, is the classiest of the three. There are ten blinds in this area on the western shore, just north of the Mackay Island National Wildlife Refuge on the North North Carolina-Virginia border. Up to five three-man parties can hunt each day on Pocahontas, with the guide choosing the best of the two blinds assigned to each group, depending upon wind conditions. Included in the total price tag of \$40 for this hunt are the use of the blinds and 40 decoys (30 ducks, 10 geese), safety equipment, boat, and the services of a topnotch guide (who gets \$30 of the fee). Split among three hunters, this comes to roughly \$13. That, friends, is cheap duck hunting!

At Barbour's Hill, located roughly five miles

south of Sandbridge on the eastern side of the Bay, the blind, decoys, a boat to retrieve ducks, and transportation to and from the blind are offered for

without a reservation, show up at 6 a.m. and let the manager know why you're there. Then cross your fingers and hope.

A former waterfowling club, the Game Commission's Back Bay headquarters has a spacious lodge and boat docking facilities.



one or two hunters for \$10. No guide comes with this package.

On the 406 acre Trojan Waterfowl Area only the blind is provided. This costs \$5 per day. You must bring your own decoys, do your own calling and retrieving, provide your own boat and motor for transportation to the blind. Trojan lies north of the Pocahontas Area on the western shore of the bay.

Hunts are assigned to applicants at a public drawing held in late October each year. The number of applicants varies from year to year. In 1979, 2,480 hunters applied for Back Bay blinds. Each hunter can apply for up to three specific dates for each of the three different hunting areas. You can also indicate your willingness to take another date if none of the three you choose are available.

Cancellations and no-shows always occur during the late season. If the party cancels early enough, the waterfowl manager assigns the date to another applicant. No-shows are another matter. These blinds are assigned on a first-come, first-served basis to any hunters present who want them. This would represent the best opportunity for someone who wanted to hunt this year, or for a person who wanted to hunt more often than the dates he was assigned.

No shows are typically rare on the guided Pocahontas trips. At Barbour's Hill, about half of the weekdays see blinds available to potluck hunters who simply drive down hoping there will be a blind open. Trojan offers the best bet in this respect: during the 78-79 season Halstead said there were no-shows on nine out of ten weekdays for the \$5 blinds here. On weekends, both Barbour's Hill and Trojan are usually occupied by the assigned parties. If you want to try getting one of the blinds

A few private blinds are also present on Back Bay, and some of the owners offer guided hunts on a commercial basis. Fees usually run \$50-60, but again, two or three hunters can share a blind. Contact local sources to arrange hunts with these guides.

Back Bay is a vast, brackish water sound that stretches from just south of Virginia Beach to the North Carolina border. Here the huge inland sea becomes known as Currituck Sound and continues its course south to Croatan Sound where the waters of the Atlantic rush in at Oregon Inlet.

Back Bay was created largely by the relentless ocean winds and waves pounding in from the Atlantic. Before the bay was formed, the continuous sliver of sand on the eastern shore that now separates it from the Atlantic Ocean was just a series of barrier islands, around which the salty ocean waters washed with the ebb and flow of the tides. Back Bay at this time was a pure saltwater sound where flounder and sea trout finned, oysters grew fat and tasty.

Wind and the pounding action of the surf eventually filled in many of the inlets with sand. Man completed the effort by creating a sand fence barrier that sealed off the bay from the ocean. The water lost much of its salinity and black bass, crappie, and bluegill moved in to inhabit the huge sweetwater sea from their homes in tidal feeder creeks.

Aquatic plants such as pondweed, eel grass, and wild celery thrived in the newly formed lake. Waterfowl flocked to the now-protected marshlands to feed on the abundant food supplies.

But the delicate ecological balance was soon tipped too far in the direction of freshwater. With



the wind building the dunes higher and higher and the sand barrier cutting off the flow, no saltwater could enter the bay. The water turned cloudy; plant life began to die off; ducks became less and less plentiful.

Concerned hunters and conservationists soon figured out an ingenious solution to the problem. They convinced the city of Virginia Beach to pump saltwater from the Atlantic into the Bay through a 36-inch pipe. The briny transfusions were life-savers for a declining Back Bay, reviving it as prime waterfowl habitat.

There are still some difficulties in keeping the pump working efficiently so that the bay maintains the 10 percent salinity desired, but in large part the problem of murky water has been solved. Plantlife — mainly milfoil now — is again thriving and ducks are back in full force.

The rejuvenated Bay draws an unusually diverse collection of waterfowl to its food-filled marshes. On any given day the observant hunter is likely to see a dozen species of ducks; over three dozen kinds of waterfowl have been identified on Back Bay during the course of a season.

Some mallards, blacks, and woodies visit the Bay each fall, but more common are gadwalls, wigeon, pintails, green winged-teal, mergansers, scaup, and shoveler. In Virginia these later varieties are *all* 10-point ducks. Under the 100 point system used by the state the shooting can thus often be both frenetic and enduring. Limits of 30 birds per three-man party are not uncommon. Hunters can also expect to down a few coots, known locally as "Blue Petes" and highly esteemed as table fare. These do not count against the 100 point duck limit and you are allowed 15 a day.

Under certain conditions ducks may pitch eagerly into the stool for Back Bay gunners. On these occasions — the first week or two of the season and on "weather" days when rain, snow, sleet, cold air, and wind combine to make the birds fly low and often — guns with modified choke or modified choke or modified and improved in doubles are excellent choices. After the birds wise up a bit and begin learning the locations of the blinds, hunters would do well to use full-choked guns and magnum loads.

Beginning in 1980, steel shot will be required in all gauges of shotguns on Back Bay. If you've purchased a 10 gauge gun to allow you to use lead shot up until this time, though, don't discard it. Pass shooting is often the order of the day on Back Bay — ducks 45 to 60 yards out. This shooting is beyond the range of 20 gauge guns with steel shot, so either 10 or 12 gauge should be toted to the blinds, with magnum loads of No. 2's or 4's.

Geese are plentiful on Back Bay — some Canadas, thousands of snows — but shooting for them is usually only fair. This doesn't detract from the joy of seeing hundreds of the big majestic fowl rising cumbersomely from the marshes and floating across the skies on a typical day in the blind.

Though the blinds on Back Bay are well-con-

structed and provide substantial relief from the bitter winds that often whip across the water, warm clothing is still recommended for the late season hunts. Strong northeast breezes can drive the wind-chill factor below zero on many days, and layers of wool and down, plus insulated hunting boots and several pairs of socks are advised.

If you hunt the Trojan Waterfowl Area with your own boat, expect to have the motor clog up in the thick weeds prevalent in the shallow water. Don't curse it though: It's what keeps millions of ducks coming back each year! The trick guides use to combat this is to quickly tilt up the motor when weeds are hit, so they can slip off the shaft. Seldom does the kicker stall out in this way.

In addition to its fine waterfowling, Back Bay offers excellent bass fishing. More bigmouths over 8 pounds were taken here last year than on any other body of water in the state. Crappie and bluegill fishing is also good. This is mostly shallow water angling, and it's quite similar to that done in the more popular Currituck Sound to the south. Weedless silver spoons, plastic worms, topwater plugs, and fly rod poppers are the best producers.

There is a handful of campgrounds in Virginia Beach and motels can be found to fit any taste and bank account. Allow a good half-hour to reach the hunting grounds from the city by driving south on Rt. 615, Princess Anne Road. Non-resident licenses sell for \$20, and you must also show a valid Waterfowl Stamp before you are allowed to hunt.

Normally the best shooting on Back Bay occurs during extreme weather conditions, as in most waterfowling areas. But if things get too cold, hunting may have to be cancelled. During the unusually cold 76 and 77 seasons ice forced a halt to hunting on 7-10 days. The Commission has an ice-breaker, however, that is sometimes able to clear a path for the hunting boat if the bay freezes up. If it looks like the blinds might be frozen in, give Halstead an advance call at 804-426-6320. It could save you a long, fruitless drive.

On our hunt, which took place during the second week of the season, we had no such worries. It was a gorgeous winter day (a little *too* gorgeous, if the truth be known). Temperatures hovered in the 30's when the mandatory 2 p.m. closing hour neared and we regrettably prepared to leave the blind.

Just at that moment a pair of mallards circled high, then drifted past us at 40 yards. Angus and Hank had already unloaded their guns, so I had this final opportunity to make or break on my own.

I swung hard past the greenhead and slapped the right trigger. The drake crumpled instantly. Rather than try for a double, I tipped my hat to his mate as she accelerated and climbed against the windy Back Bay skies.

It was 2 p.m. Chilled from the mounting breeze but warmed inside by our luck, we made the cold, wet ride back through crashing waves to the Pochontas Lodge. Crackling flames still lingered to greet us from the clubhouse fireplace.



*A canoeist unloads his boat on a foggy morning for a final trip down the Jackson.*

# Jackson River Farewell

The author remembers the Jackson, free-flowing water and good fishing.

by Bob Gooch

My cast was slightly off target — overshot my mark.

The tiny spinning lure sailed over a vine and splashed into the water beyond. Grunting my disappointment, I tried to flip the lure back into the water without snagging — a tricky maneuver. The lure danced on the surface — and you know the rest.

A fish grabbed it.

The story would be better if I had hung a lunker, but it wasn't to be. Instead, I had a lively rock bass to reckon with on the other end of my already fouled up line.

"Let's paddle over and try to land it," I said to Mark, my young fishing partner.

That bit of action took place almost four years ago, but I am recording it here for posterity — while it is still fresh in my mind. For that was my farewell to the Jackson River, a river even then doomed to die behind the controversial Gathright Dam.

I remember well stringing that plucky little fish and wondering if it would become my final fruit from the Jackson. But I should have known the river better. We maneuvered the canoe back to mid-stream where we could cast to the shoreline of the picturesque mountain stream.

Mark Lofgren and I were fishing the famous Jackson River in mountainous Alleghany and Bath Counties that distant summer day. The section we had chosen for our late summer trip was the deep oxbow between the Kelly and McAllister Bridges.

The Jackson made a wide sweep to the west here and was unique because an angler could park his car at the Kelly Bridge, launch a canoe and fish downstream to McAllister. It was a good half-day fishing trip, but the road distance between the two bridges was a short country mile. Once he reached the McAllister Bridge the angler could hike the

short distance back to Kelly for his car.

I had used this approach often — even on solo trips.

I was riding the stern seat that bright summer day and it was my job to keep the canoe parallel to the shore. I was fighting the stiff current when Mark got a good strike.

I recall how I tried to hold the light craft steady while Mark fought his frisky fish.

It was a good one. It had struck just feet from the canoe as Mark was working his lure back from a cast to the grassy shore. His tiny spinning rod bowed beautifully with every lunge of the fighting fish. I remember holding my breath as the fish shot under the canoe, and then sighing with relief as Mark poked his rod beyond the bow to follow the fish. Next it cracked the surface in a spectacular leap, spraying silver droplets of pure water.

"Pickerel!" We spoke simultaneously.

We had been on the river less than 30 minutes, I recall. The steel trusses of rickety Kelly Bridge were still visible upstream. I remember how the fast Jackson was calm there — pondlike and as smooth as a mirror except for the ripples fading away from the battling pickerel.

That trip was Mark's introduction to the Jackson, but for me it was a sentimental one — possibly my last on the beautiful stretch of water. The river was slated for execution, to be strangled and suffocated by its own sparkling waters rising behind the huge concrete dam already being wedged into the famous Jackson River Gorge below McAllister Bridge. Even as we had launched our canoe, a sign had warned us of construction hazards ahead.

Our trip to the river had been a strange one, emotionally — spirits boosted by the prospect of a fine day on a singing stream under balmy skies,



but tempered by the cloud of death that hung over it. En route we had picked our way through giant earthmoving machines that lined the road to the river.

But now the signs of "progress" were temporarily behind us, and we had the river to ourselves. Possibly most anglers and canoeists had already marked off the Jackson. Today we could enjoy it, casting aside for the moment the bleak tomorrow.

I remember how the quiet nature of the river ended eventually, and we found ourselves racing down a short stretch of singing rapids.

The rapids bottomed out and we were in slower water again. It was not quiet water, however. The currents swirled and surged, creating deep, mysterious pools and foam-flecked eddies.

We had steered the canoe into a reasonably quiet spot and started casting to the faster water. Positioned against the eastern bank of the stream, we were able to cast diagonally across it. The current swept our spinner-fly combinations downstream.

I remember commenting that it was my time to score. And I did.

As my lure started to swing around at the end of a drift, something hit it — hard. I struck immediately and hung on as a good fish made a strong run with the current. My reel, its drag set lightly to protect my thin line, screeched in protest, I recall. But I was able to turn the fish and head it upstream.

The memory of that fish racing for the surface is still sharp! I tightened my grip on the rod and kept a tight line.

The surface cracked open and a glistening small-mouth bass was airborne.

"The net!" I yelled, as Mark steadied the canoe, keeping it out of the water.

Soon the bass joined the rock bass and Mark's pickerel on the stringer — now beginning to look respectable.

As I reminisce I see the action slowing a bit as the summer sun rose high above the rugged mountains and bathed the river valley in its warm glow. I recall few hot days on the Jackson, however — even in midsummer. The fast, clean water and cool air seeping out of the dark hollows always proved their worth as nature's air conditioners.

We drifted along, casting almost methodically, and enjoying the respite from the summer heat that gripped the eastern part of the state.

The Jackson was low that August — as are most rivers in late summer. A wide sand bar loomed ahead where the river swung to the west against a lushly forested shore.

"Let's beach the canoe and stretch our legs," Mark had suggested.

I agreed whole-heartedly. My legs were stiff from the long session in the canoe.

We pulled the canoe well up on the bar and split to fish the swift water that raced by. One stretch of gurgling rapids looked particularly fishy.

The river tumbled over a submerged log, worn slick by years of rushing water. Below the log the river had churned out a long, deep, hole.

"Good place for a fish to lie and wait for food," I hear myself mumbling as I cast my shiny Mepps spinner to the log and into the churning water below. I fingered the tight line as the current gave the lure some seductive action.

"Wham!" I can still feel the jolt of the strike.

The fish and the current became allies, and I recall feeling over-matched with my ultralight spinning tackle. This fish fought doggedly also — just as the others had done. I did have the advantage of solid ground beneath my feet instead of the somewhat unsteady canoe. The fish tired as I let the wandlike rod do its work. Finally, I led the fish to the bar and scooted it onto the sand.

Rainbow! In my mind's eye I still see its rich colors glistening under the noonday sun.

The Jackson was always a rich river — small-mouth bass, pickerel, and rock bass were native to the stream, and released trout did well in the icy water. The better trout fishing was upstream a bit, but some good fish drifted down.

In the years since that memorable trip there have been sparks of hope the Jackson would somehow be spared. There were the previously unknown caverns that caused some second thoughts about the safety of the construction, and skyrocketing costs drove the cost-benefit ratio completely out of proportion. One of President Carter's first acts was to order a review of reservoir projects across the country. I looked at the list in vain. Gathright was not among them. In the meantime, the bulldozers have continued to rumble. Now the "No Fishing" signs have relegated that section of the Jackson to the memories of anglers like myself.

Near the apex of the deep bow in the river we paused to drink in our rich environment. To our left, a broad meadow stretched away to the road, and on our right, forested cliffs rose abruptly from the river. Here and there giant boulders stood like statues, mellowed by the wind and rain, the summer sun, and the snow and blizzards of the harsh western winters. Unyielding, they were a match for the elements — vulnerable only to time and the indiscretions of man.

I tried to envision the controversial lake, its broad waters lapping against the rocky cliffs and snaking deep into the dark hollows.

But then I decided I could best serve posterity by fixing firmly in mind a mental picture of the yet unspoiled valley, the singing river, the broad meadows and the forested hills.

Would I someday be able to describe to another generation the rich country that nestled in the valley then cradling the deep waters of a huge mountain reservoir? I doubted it.

Sadly I hauled out and put the canoe atop my Scout and drove slowly out of the valley. My river was doomed, and I can't go back.

# THE WALLEYE BONANZA

by Charlie Sledd

**L**urking in the dark bottoms of many Virginia lakes and streams is a fish that tastes great, is an opponent worthy of any sportsman, and is vastly under-fished. Walleye, frequently called pike and walleye pike, due to stocking by the Commission of Game and Inland Fisheries are now found virtually statewide.

Large opaque eyes, sharp canine teeth and a white tip on the lower margin of the tail distinguish the walleye from its relatives in the perch family.

Walleye have been found naturally in the Big Sandy, Tennessee, New and Lower Roanoke River drainages in Virginia, but trade agreements with other states have brought walleye to many Virginia waters. Eyed walleye eggs are sent here in exchange for striped bass larvae and are hatched in Virginia and stocked in rearing ponds at 100,000 per acre. In late April and on through June, fingerlings from the rearing ponds are stocked in various lakes and streams throughout the state.

Generally, walleye stocked in Virginia waters grow to 10 inches in their first year, 17 inches in their second, and 21 inches their third year. A 3 year old fish usually weighs between 3 and 4 pounds. Roy G. Barrett of Fries, Virginia holds the state walleye record with a 22 pound 8 ounce fish from the New River upstream from Claytor Lake.

White and yellow jigs tipped with worm, minnow, or pork rind; minnow imitating lures; live minnows; and air-inflated night crawlers are among the better walleye lures and baits. The most productive fishing periods generally occur during the spawning season, usually March and April. The fish normally spawn at night when water temperatures range between 39° and 50° F, but peak spawning occurs between 44° F and 48° F. Spawning is

usually noted in water 1 to 5 feet deep over gravel or rubble. In the immediate post-spawning period, usually the latter part of May and early June, walleye are frequently caught by casting minnow imitating lures to brushy and rocky shorelines at night. Deep jigging with spoons and jigs is generally the most productive fishing method during summer, fall, and winter. Very slow trolling with bait bounced along the bottom may also produce fish during summer and fall.

No size limit for walleye currently exists in the state's waters. The daily creel limit is 8 per day except in South Holston Reservoir where a special 5 fish per day creel limit is enforced.

Most state fish biologists consider the walleye to be presently under-exploited in Virginia, possibly due to its lack of aggressiveness on hook and line. However, as table fare the fish is certainly unequalled among freshwater fishes. This plus its availability and excellent growth rate should stimulate interest in the walleye in Virginia.

## **WHERE TO FIND WALLEYE:**

### **Northern Virginia**

Lake Orange  
Abel Reservoir  
Lake Manassas

### **Charlottesville Area**

Lake Shenandoah  
Totier Reservoir  
Fluvanna Ruritan  
Beaver Creek Reservoir

### **Richmond Area**

Lake Anna



**Roanoke Area**

Claytor Lake  
Smith Mountain Lake  
Philpott Lake  
Carvins Cove Reservoir

**Southeastern Virginia**

Lake Burnt Mills  
Lake Smith  
Lake Whitehurst  
Western Branch

**South Central Virginia**

Lake Amelia  
Lake Gaston  
Leesville Lake

**Southwestern Virginia**

John Flannagan Reservoir



Lake Burke and Brittle in northern Virginia, Lake Nelson in the Charlottesville area, and Lake Trashmore in the southeastern region are scheduled for stocking in 1979.

The author wishes to acknowledge the help in preparing this article of the Fish Division, Commission of Game and Inland Fisheries.



Illustration by Spike Knuth



# Wildlife From a Brush

## The Art of Duane Raver

For over 30 years, North Carolina artist Duane Raver has been translating what he has seen in the outdoor world around him, to paintings and drawings. July 1 he retired from the N.C. Wildlife Resources Commission where he served 10 years as a fishery biologist and nearly 20 years as editor of *Wildlife in North Carolina* magazine.

His first love, as far as subject matter goes, is fish. "But most folks don't want a fish on their livingroom wall, so I had to include song birds, waterfowl and other things," he said recently. "I don't feel comfortable with big game, and I guess quail would be my favorite subject," Raver commented.

Working in acrylic and opaque watercolor, he relies on field sketches, bird skins, mounted animals (his daughter is a taxidermist) and photos. For further information he can be reached at 910 Washington Street, Cary, N.C. 27511.









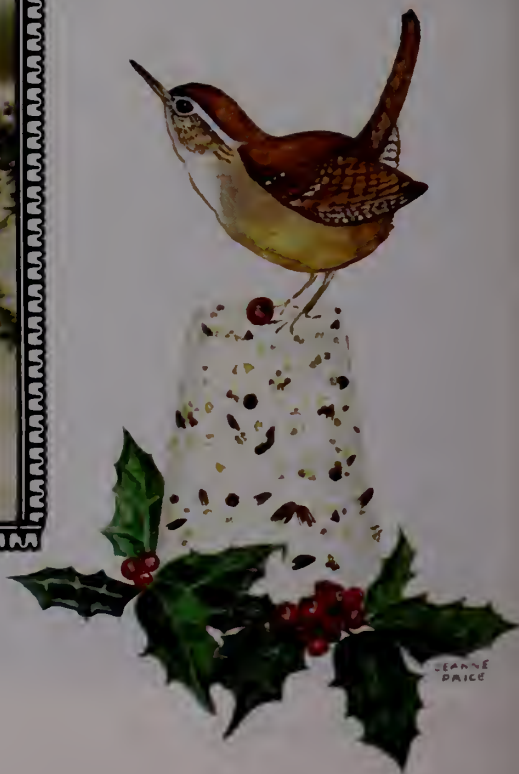
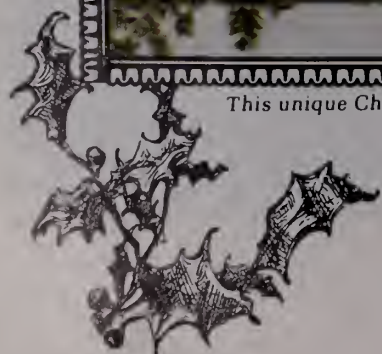


# CHRISTMAS CRAFTS

by Jeanne Price




This unique Christmas tree is made of bird-attracting suet and seeds.



JEANNE PRICE





# These decorations are for the birds!

**W**ant to have some fun making Christmas decorations and benefit your wild birds at the same time? The birds will love you for it and in return give you and your holiday guests many hours of pleasure as you watch them devour their Christmas feast.

Here's how to make a Christmas tree, Christmas balls, and candles for your feathered friends.

## HOW TO MAKE YOUR TREE

Cut three shelves of rough boards  $3\frac{1}{2}$  inches wide. The three lengths should be 14, 10 and 7 inches. Run a  $\frac{1}{2}$  inch dowel 24 inches long through these shelves placing the smallest shelf  $3\frac{1}{2}$  inches from the top, the next shelf  $5\frac{1}{2}$  inches below that, and the third  $5\frac{1}{2}$  inches below the second.

Using an 8 inch clay flower pot, support the bottom of the dowel holding the shelves in either one of two ways. Either glue the dowel into a disc, which you wedge horizontally in your stone weighted pot, and over the disc with more stones or gravel, or, close securely the hole in the bottom of the flower pot and pour plaster of paris into the pot, centering the dowel in the cementing agent.

Do not paint the shelves because your suet mixture will adhere better to rough boards.

## HOW TO DECORATE YOUR TREE

Ask your butcher for 20 pounds or more of beef suet. Grind this up or cut into small pieces and melt it in a big pot in a slow oven ( $250^{\circ}$ ) or on top of the stove over a low flame in a double boiler or dutch oven. This can take from 2 to 4 hours, so work at something else but don't forget it.

When melting is completed, strain carefully to get pure liquid. If you cool it and melt it again, the suet will set harder the second time and look as white as snow.

As soon as the suet has cooled to the consistency of pliable cake icing, add birdseed, nutmeats, raisins, currants, cracked corn and chopped apple. Spread this generously on the three shelves. Let the

artist in you come out, and allow some to drip over the sides to resemble icicles. As it cools further, stick some more food into your "snow" and decorate the tree with Christmas cheer.

## HOW TO MAKE YOUR CANDLES AND BALLS

You will want to save some of the suet mixture for your candles and balls. Pour it into plastic cups, and store them in your freezer or refrigerator. When you are ready to put one out, just cut the plastic cup away.

When you can form balls with your hands, these should also be put in a cold place until you have time to wrap them in brightly colored mesh or woven onion or potato bags and tie them securely with a ribbon.

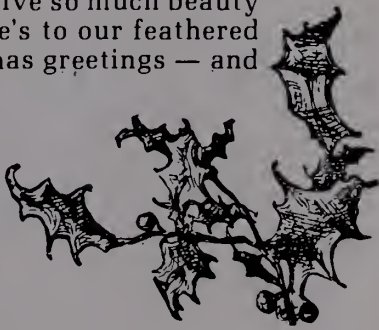
## WHERE TO PUT YOUR DECORATIONS

You will want to put out your Christmas tree, a candle and a few balls early in December so the birds will be quite used to them by the time the holidays roll around. It may take a week for the birds to approach a Christmas tree you have placed at your feeding station or window feeder.

I had trouble with squirrels when I first put the tree on my feeder. Having a windowsill the squirrels couldn't get to, I attached a braced shelf with a hole cut out of the center to accommodate the flower pot. Now I can stand at this dining room window and watch chickadees, gold finches, evening grosbeaks, wrens, mockingbirds, purple finches, blue jays, nuthatches, hairy, downy and red-bellied woodpeckers, titmice, pine siskins and assorted sparrows, all at very close range.

I hang my Christmas balls on trees outside our windows and the Christmas candles make attractive windowsill decorations. My Christmas tree is replenished time and time again and is often still in use at Easter time!

Birds ask so little of us and give so much beauty and pleasure in return. So here's to our feathered birds! Bless them with Christmas greetings — and eatings!



# Personalities

By Francis N. Satterlee

## Charles R. Chappel Carroll County Warden

At the time of his birth in that city, Charles Chappel's father was Mayor of Galax. Actually, the elder Chappell was Mayor for a period of four years, but that was in addition to owning and operating a general farm and a store in that community.

Charles matured in this atmosphere of politics, business and agriculture with the added spice of the training in hunting and fishing and learning to love the outdoors which he received from his father and three older brothers.

As he grew up there were farm chores to do plus frequent stints as a clerk and general all-round hand in the family store. Although these activities "kept him out of mischief" after school and during summer vacations, he still found time to be afield with his father and brothers and with the good bird dog that the family always proudly owned.

He graduated from Galax High School at the tender age of 16 years weighing 240 lbs. and in possession of a football scholarship to the College of William and Mary. However, W.W. II was in full swing and there were not enough men at W & M to make a full team. This deplorable situation was changed when the W & M coach arranged to have Chappell's scholarship transferred to Temple University in Philadelphia, Pennsylvania. Charlie played tackle for Temple for one year and was then forced to return home due to a serious injury. Following an operation and 1½ year period of recuperation, he was accepted in the U.S. Navy where he served for two years. After being discharged, he returned to Galax and farming, but chose to remain in the Navy Reserve. Two years later, in connection with the Korean War, he was recalled to active duty. He served aboard an Attack Transport (ATA) operating out of Norfolk until 1953, when he was again discharged.

At this point in his life, he and his father went into partnership and purchased a Firestone store. He worked in that trade for three years, at which time he was hired as Chief Deputy Sheriff for Carroll County, Va. In 1959 Charles learned of an opening for a Game Warden in that County, applied for the position, was hired and has been there in that capacity since then.

The most satisfying aspect of his job as a Virginia Game Warden is the opportunity to be outside working with the sportsmen and women of the Commonwealth. He is very proud to be in a position where he can work with young people in helping to



prepare them as future stewards of the nation's environment and wildlife. He is also immensely proud of being in a position where he can protect the wildlife and waterfowl, through the enforcement of legal harvests and seasons, for future generations.

In 1972 Charles was selected as Warden of The Year in Virginia. On Saturday, October 27, 1979 he was recipient of the "Water Conservationist of The Year" award presented to him by the Virginia Wildlife Federation during the annual Conservation Awards dinner, held in Virginia Beach.

He is married to the former Luvine Ferrell from the Carroll County community of Five Forks. The couple has one son, Charles, Jr. who, during the summer of 1979, became an Eagle Scout, is Chapter Chief in the Order of the Arrow and like his father before him, is being taught about the wisdom of the wild by a loving and understanding parent.



# Growing Up Outdoors

By Sandy Coleman

## MISTLETOE AND CHRISTMAS

Did you ever wonder just how such a small and insignificant plant as mistletoe could become our Christmas kissing symbol?

This small plant is associated with Christmas for several reasons only in England and America, while the Christmas holiday is celebrated almost world-wide.

Mistletoe is found in Virginia growing way up in the top of our trees. Usually the only way to reach it is for someone with a very good aim — and good eyesight — to spot it and shoot it down. When finally obtained, it holds a prominent place in the home during the Holiday Season. Tacked in doorways and in other likely places, the tradition goes that anyone caught standing under it must pay the penalty of a kiss.

But where did this mistletoe tradition originate?

The first group known to use the small mistletoe plant in any form were the Druids, the ancient people who lived in the country that we know today as England. The Druids were not Christian people and they had many religious beliefs that seem strange to us today. Mistletoe was part of those beliefs. The Chief Priest blessed the mistletoe and divided it up among the people, who took it to their homes. It was believed to have protected the residents from witchcraft and was thought to aid healing.

Another legend concerning mistletoe is from another part of the world.

The Norse people were Vikings and travelers who left their mark on much of Europe and even America itself. They had their own mythology, similar to that of the Greeks and Romans and mistletoe had a part in that, also.

Balder, the ancient Norse God of Light, similar to the better-known Apollo, was said to have been killed by mistletoe.

The other gods and goddesses, knowing of the great importance of the God of Light, made all living creatures, both plant and



animal, vow never to harm Balder. Mistletoe was considered too insignificant a plant to ever be able to harm the God of Light, so no vow was gotten from this plant. The God of Evil learned of this terrible omission and threw a mistletoe dart at the God of Light and, thus, killed Balder. Despite the outcome of this legend, the sun continues to shine.

Perhaps because of these pagan beliefs and their association with mistletoe, the Church has never accepted mistletoe as part of their Christmas celebrations. Nevertheless, in England and American homes it is an indispensable part of our Christmas legend and folklore. But beyond these early legends, we don't know how it became a part of this tradition!

In England, there is an interesting twist to the mistletoe legend.

When a kiss is claimed under the mistletoe, a berry is removed. When all the berries are gone, the mistletoe is no longer effective!



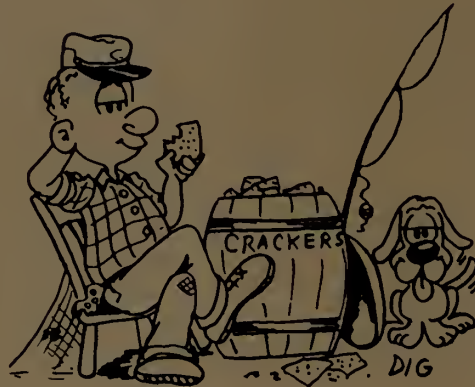
# It Appears to Me

## By Curly

### ....A PERSON OUGHT TO HAVE ONE

Although the publication was dreamed up for use by folks in Fairfax County, Virginia, I am certain that those of you who are interested wouldn't be turned down if you requested a free copy. "Something to Dwell On: Home Buyer's Shopping Guide" is a publication meant for people who are cogitating about the purchase of a home in that part of the Commonwealth. This 58-pager is an updated version of what the Fairfax County's Department of Consumer Affairs first produced in 1974. In it are details which lead a person through the steps in buying a home. These include, in addition to current information about the county, discussions about traditional home ownership verses Condos and Coops, buyer protective legislation, sales procedures and other negotiations just to mention a few. Single copies are free from the publications counter in the main lobby of the Massey Building, 4100 Chain Bridge Road, Fairfax, Virginia 22030. Interested persons may write to department of Consumer Affairs at that address or call 703/691-2974.

Now here is something to warm your heart, or for that matter the whole of you. It seems as though some right thoughty people down at the Virginia Department of Agriculture and Consumer Services have anticipated the need for advice pertaining to the use of fireplaces and wood stoves. The folks at VDACS are publishing a "Firewood Directory" which will list the source of that material throughout the Commonwealth. The utilization of the state's natural resources to keep warm is downright sensible and the directory should prove to be very useful to old time residents and newcomers alike, especially since the plan is to update it as required. Write for a free copy



from VDACS, 203 North Governor Street, Richmond, Va. 23219.

One of the things that a good many of us do for the sheer fun and satisfaction of it all... is to cook. It really doesn't matter if we are in the gourmet class if it is enjoyable. I reckon that is where I fit in, considering I do right much and just for me. Howsomever, one thing that I have learned is that using herbs does wonders, (covers up my mistakes) and they really do enhance the taste. Herbs are not hard to grow, either, and the Department of Agriculture has made up a pamphlet on the subject which is free. Just send a post card to the Consumer Information Center, Department 621G, Pueblo, Colorado 81009, requesting "Herbs."

### ...FOR YOUR BOOKSHELF

Stocking Stuffers and Santa's Helpers, Attention!!! I have just run across two marvelous publications which are absolutely perfect for your consideration. Frankly, I can't believe that they have just become available in time for Christmas... but it's true. "The Chesapeake Bay: A Boating Guide to Weather" has been produced by the Sea Grant Advisory Service of the Virginia Institute of Marine Science at Gloucester Point, Va. Co-authored by Jon Lucy, VIMS

Marine Recreational Specialist, Terry Ritter, National Weather Service, Washington, D.C., the book (I predict) could very well become the 'boater's home and float companion.' My goodness, the text covers everything from the Bay climate, including the freak and fickle phases thereof through survival methods based on fact not fiction, sources of weather and other information and even delves into emergency situations. Incredible, but true, this handy-dandy is available for \$1.00 from the Sea Grant Communications Office, Virginia Institute of Marine Science, Gloucester Point, Va. 23062.

Now then... does the name John Hurt Whitehead III sound familiar to you? Are you in the market for something beyond the exquisite, something that you can give some very special person, maybe even you? Well, folks, it is available and a knockout! "The Watermen of The Chesapeake Bay" is a press-fresh photo essay about the Bay and the unique people that make it that way. This is Virginian John Whitehead's second book and it is a powerfully poignant masterpiece done in full color. I think it is so good that it seems a body can actually smell the salt and savor the solitude that is the Bay. Worth every penny of the \$19.95 price, "Watermen" is available at most metro bookstores and in bayside banks.

### ...AND THEN

Once again it is time to wish all of you a very Merry Christmas. For me, and perhaps for you, the year has flown by and maybe, just at this time, we ought to stop to ponder a bit. So let me leave you with these thoughts by that "ole smoothy" Will Rogers: "The way we are acting, the Lord is liable to turn on us any minute; and even if he don't, our good fortune can't possibly last any longer than our natural resources."



# In Nature's Garden

BY ELIZABETH MURRAY



## Hollies

Illustration by Lucile Walton

When Linnaeus was working on his classification of plants, he realized that the evergreen holly oak or holm-oak was an oak and not a holly, and so it would have to go into the genus *Quercus*. However, he retained the holly name in the specific nomenclature, and called it *Quercus ilex*. To the true holly, he gave the generic name *Ilex*, but because it had always been known as *Aquifolium*, meaning 'sharp-leaved', he called it *Ilex aquifolium*, which remains the scientific label of the European holly today.

The European holly does not grow well in the American climate, but we have in its place the quite similar and closely related American holly, *Ilex opaca*. It is just as good for Christmas decorations since the female trees (the sexes are separate) have lots of brilliant red berries. The berries usually stay on the trees until after December, although they may be eaten by birds during the dour winter months of January and February.

The American holly is a medium-sized usually 30 to 50 feet high, although it can be as much as 100 feet, and the state record is held by a tree in Cumberland State Forest which is 68 feet. There is a tree that obviously used to be a record-making one on Hog Island in Surry County. A few years ago a storm took its toll of all but the first fifteen feet, but the venerable remaining stump (of enormous girth) is still somehow deserving of our admiration and respect.

*Ilex opaca* grows naturally from the coast of Massachusetts south to the middle of Florida and west to eastern Texas, Missouri and West Virginia. It is frequently cultivated, adapting well to many different kinds of soil. When we bought our old house in Albemarle County, we were pleased with the huge old holly on the west side of the house, but sad to find that it was a male tree and hence had no berries. We transplanted three small seedling hollies, too small to have flowers, from the woods, and were delighted to find several years later that we had gambled correctly. Our erstwhile bachelor tree now has three young brides who are just beginning to have a respectable crop of berries each year.

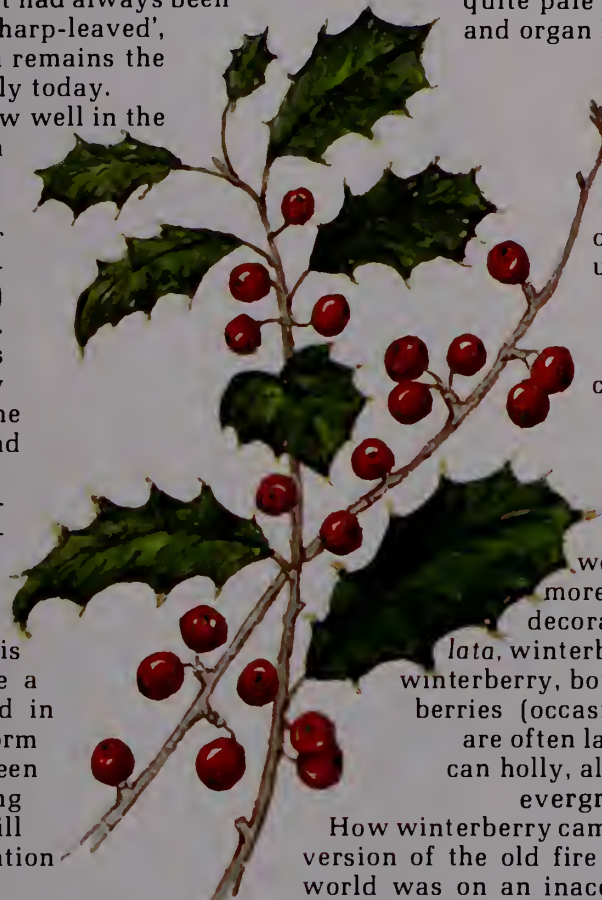
The association of holly with Christmas is a very old one, and the name holly may have come from its use as a decoration during Holy week. Holly wood is of some economic importance, being used for cabinet work and carving. It is very hard and close-grained and will take a high polish. The sapwood is quite pale and was used to make piano and organ keys because of its similarity to ivory.

In coastal areas of Virginia there is another evergreen holly which goes by the unattractive name *Ilex vomitoria*, the yaupon. Leaves of this holly were frequently used to make tea, but too much of the drink had dire emetic consequences, hence the name.

There are also several deciduous hollies native to the state. Mountain holly, *Ilex montana* is a frequent shrub or small tree along the Appalachians. The possum-haw, *Ilex decidua* grows in low woods and bottom land. And more spectacular at the Christmas decorating season are *Ilex verticillata*, winterberry, and *I. laevigata*, smooth winterberry, both of which have brilliant red berries (occasionally yellow.) The berries are often larger than those of the American holly, although of course there are no evergreen leaves to "set them off."

How winterberry came by its red berries is told in a version of the old fire legend. The only fire in the world was on an inaccessible island, guarded by a monster, and various animals set out to try and procure it. The tortoise failed because he was too slow and the fire went out, the deer lost it in a thicket and the kingfisher dropped it into the sea during a dive. Finally the unpopular crow succeeded where the others had failed. His only mistake was to brag of his achievement as he arrived which caused all the red coals to fall. Only one was saved for fire, and the rest dropped onto bushes to make winterberries.

Well, that suits me. We all need cheering up in the winter months, and the bright berries of so many members of the holly family make a big contribution towards this.





# *Impressions of Assateague*

*by Bob Deans*

*The sights and sounds of this Eastern Shore  
island provide a cornucopia of wildlife.*





The famous Chincoteague ponies have been on the island since the 18th Century, victims of the romantic wreck of a Spanish ship.

Assateague. The tiny island abounds with rabbits, squirrels, deer and other animals indigenous to mainland Virginia, while hosting furred and feathered guests from as far north as the Arctic Circle, as far west as Alaska, and from across the Atlantic to Spain.

Wild ponies that roam the island freely, grazing in its rich grasses, are believed to have been brought over centuries ago on ill-fated Spanish ships. The vessels sank somewhere off the coast, the ponies swam ashore and thrived in their secluded habitat. Each summer attention is focused on these ponies when they are rounded up and led across the channel to nearby Chincoteague.

But during the winter the main attraction here is birds.

Snow Geese, Canada Geese and Whistling Swans fly down annually to winter in Assateague and other coastal areas between Delaware and the Carolinas. They come for warmer weather, and the ample food supply provided by the marshes.

The Canada geese fly down from the northern extremities of Greenland, Canada and the Arctic Circle. They cruise at between 30 and 40 mph and have been known to fly as high as 25,000 feet to find the proper wind conditions for their flights of between 600 and 1000 miles a day.

The whistling swans (so named for the sound they make in flight) travel from the northern reaches of Alaska, coming across Canada and the great Lakes before entering the U.S. Midwest and making their way east.

I spent a near sleepless night on Assateague last November, beneath a brilliant moon, pondering these great birds.

The sound the geese make is described by James A. Michener in *Chesapeake* as *onk-or*. While the geese might spell it differently, the main word in their vocabulary sounds exactly like *onk*.

But it is the inflection of the verb *onk* that gives it definition. For example, as the first light of pre-dawn began to open up the marsh, the "early-birds" began to revel, quite vocally, in anticipation of the warmth the sun would



*Assateague Island, along with the mainland's Bock Bay, prove to be a major wintering ground for snow geese.*



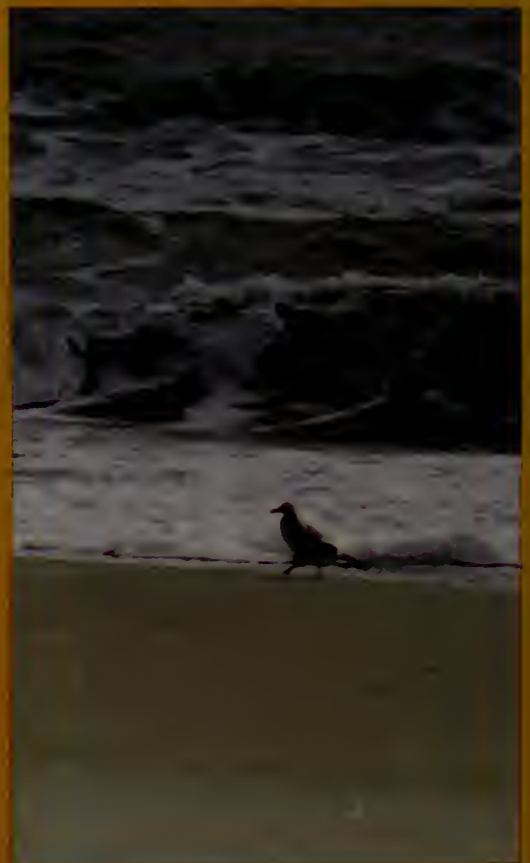
surely bring. Onk, a bit subdued at first, then more excitedly, onk, "Wake up!" Maybe it was the older geese who wanted a bit more sleep and responded drowsily, with appreciably less enthusiasm, just a single, faintly slurred onk "pipe down."

But within a half hour, no one could escape the celebration that was rushing throughout the entire marsh. I only wish I could replace the brutal buzzing of my alarm clock with the placidity of that morning serenade.

I couldn't fight the urge to belt out my own rendition of that ancient message: "onk, onk, onk." But mine came out much too throaty, not nasal enough, and upon repetition began to fold more into the oink oink of a pig than the more glorious note to which I aspired.

As I stalked the birds through the marshes that morning, trying to get close enough for some pictures, the old masters made a mockery of my feeble audition.

I had to agree.



VIRGINIA WILDLIFE



# Outdoor Notebook

"I think that I shall never see, a poem as lovely as a tree." Joyce Kilmer, the author of the lovely poem, *Trees*, would have commended Roger Huff and the City of Virginia Beach, Virginia for their endeavor to save a giant Sycamore tree estimated to be approximately 300 years old.

The tree which is 70 feet tall and has a circumference 15 feet and a cavity in its lower half bigger than a walk-in closet.

Huff, the city's arborist, had filled other tree cavities in the past. But the great, old Sycamore was another story. He felt that the city did not have the expertise to tackle it alone.

"It's an old, old art," Huff said, "The method of using concrete for filling is practised more frequently, but not always. There are some instances when we fill cavities with polyurethane material, like Styrofoam, then again, sometimes we will leave the cavity open and cover it with a tin facing. Then," he said, "there are circumstances when we don't want to fill it at all."

Huff was pressed into action by the city's Landscape Services division. concerned about the tree himself, he hurried out and ran some tests to see if the Sycamore could be saved. He made test borings of the roots and parts of the trunk to see if there was enough hardwood remaining. Test results proved there was hope.

Huff said that filling a cavity as large as the one in this particular tree which grows on the Rose Hall estate in Virginia Beach is unusual because of the cost and expertise of the people who do it. "In this case the tree had a cavity in it leaving no more than six or eight inches of shell on the outside," he said, "leaving all this void space in the center. In order to save the tree, we had to get a filler in there to give it some support."

There was hope for the tree. It was decided, however that an expert should be called in because of the magnitude of the job. The city

## Surgeons Save Tree Dating Back to 1600's



contracted with Davey Tree Service, of Kent, Ohio. The company sent its man, C. E. Smith, up from Raleigh, North Carolina to do the filling.

Huff explained that the decayed heartwood had not killed the tree because the heartwood is not the tree's food channel.

"The center wood — the heartwood — is composed of dead cells," said Huff. "There is no nutrient going up through the center. The center layer does nothing but support. It doesn't send anything up or down."

The food channels are the layer just under the bark known as the phloem which brings nutrients down from the limbs. Another layer known as the sapwood, just under the phloem takes nutrients up to the limbs.

In the old Sycamore in Virginia Beach, the phloem and the sapwood were found to be in working order.

Smith, the surgeon, and Huff, his able assistant, theorized that once the Sycamore was a tree with two main branches coming out of the trunk. That perhaps one of these branches had been ripped

off by a storm some years ago, leaving a tear in the bottom of the trunk.

Once the cavity was cleaned and the bracing rods in place, Smith started filling the cavity with concrete — four tons of it — in all.

As he filled the cavity, Smith inserted expansion joints in the concrete to compensate for the sway of the tree and the contraction of the hot and cold air.

Huff, assisting Smith said the concrete not only gives the tree support but fills the void where the tree could get insect infested and areas where water could collect.

According to Huff the procedure is much like filling a tooth. It gives the tree something to grow around and tighten up. He said there will come a day when the tree trunk would grow completely around the concrete outer patch and there would be no more concrete in sight.

Smith said that with the proper fertilization and maintenance the old Sycamore still had some good years left.

"About another 150 years," Huff said.—Leona Lilley



## 'Significant' Virginia Caves Sought

The Virginia Cave Commission was established by the 1979 General Assembly. Its eleven members were appointed to study problems relating to cave use, protection and conservation.

One of the most important tasks of the Virginia Cave Commission is to identify all significant caves in Virginia and report any real and present danger to such caves.

With this list the Commission hopes to convince public officials and various federal, state and private agencies of the need for preservation of valuable cave resources through proper protection and management. The criteria being utilized in establishing the list include significance in one or more of the following categories: archeological, biological, economic, esthetic, geological, historical, hydrological, recreational, and size (length and depth). Although we have an impressive body of information already on hand from published sources, we would welcome additional information from interested persons in the form of nominations for the list.

Nominations for the list of significant caves should include:

- 1) Name of the cave (plus any alternate names).
- 2) Location by county, U.S.G.S 7.5' quadrangle, and latitude/longitude or some other specific geographic indication of the entrance(s). If the name and location are already published, then simply refer to the source (e.g., Douglas, 1964; Holsinger, 1975).
- 3) Name of cave owner and address, if known.
- 4) Reasons why you consider the cave to be significant. Please

## Hunter Safety Home Study Course

If you're giving anyone a gun for Christmas this year, think about safety, too.

The Virginia Game Commission has available at the cost of \$1.00 the *Hunter Safety Home Study Course*, the perfect companion for that gift of a gun.

The *Hunter Safety Home Study Course* is available from: Virginia

Game Commission, Hunter Safety Course, P.O. Box 11104, Richmond, Virginia, 23230. Please make checks payable to *Treasurer of Virginia*.

Make a good start towards safety part of your gift.

## Our Mistake

In the October issue of *Virginia Wildlife* in Joan Cone's "Gourmet Game" series, a sharp eye could discern that those photographs in no way resembled rail or woodcock! We regret the error.



## Have a litter-free Christmas!

GREETINGS FROM YOUR VIRGINIA DIVISION OF LITTER CONTROL  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT



## Contest Winners

Winners in the recently concluded State Big Game Trophy Contest are shown with the entries which brought them that distinction. Back Row, left to right: Bear Skull (275 lbs., 26 4/8 pts.) which was judged First Place for Douglas Karnes, Bedford, is held by taxidermist Melvin Mitchell. Tim Holt holds the trophy head which won First Place in Class II (8 pts., 184 1/16) for John M. Bangit, right, Lee Hall. First Row: Class I winner Terry Spillman, Farmville, holds his trophy (20 pts. 222 3/16). Class IV Archery winner G. R. Anderson, Luray, with the head which was judged (9 pts. 172 15/16) and Class III winner Michael S. Staley, Norfolk, with his trophy which tallied (6 pts. 145 13/16).



### Caves continued. . .

be concise, but remember that we must carefully document significance and justify the importance of each cave placed on the list.

Please forward your nominations to:

Inventory of Significant Virginia Caves, c/o Dr. John R. Holsinger, Dept. of Biological Sciences, Old Dominion University, Norfolk, Virginia 23508.

The deadline for receipt of information is December 31, 1979.

## Cardinal Prints Coming Next Month

Looking for a unique Christmas present?

Prints of Durant Ball's cardinal and loblolly pine October, 1978 Virginia Wildlife cover are available from the artist. These signed, numbered and remarked prints are a limited edition of 1000.

Send \$35, plus \$3.00 for shipping and handling, to: Durant Ball, 7 Atkins Lane, Newport News, Virginia, 23602. Virginia residents must add 4% sales tax.

### THE BEACH IN WINTER

The Shore is Far From Dead in the Cold Months

### PEAKS OF OTTER

A Look at One of Virginia's Most Beautiful Spots

### SHOULD YOU FERTILIZE YOUR FISH POND?

The Answer to this Just Might Surprise You

**Virginia Wildlife**

Virginia Wildlife  
P.O. Box 11104  
Richmond, Virginia 23230

BY SUBSCRIBING TO VIRGINIA WILDLIFE, YOU SAVE 50% OFF THE NEWSSTAND PRICE! SEND YOUR CHECK OR MONEY ORDER TO:

\$5.00 FOR 1 YEAR OR \$12.50 FOR 3 YEARS

Name \_\_\_\_\_ New \_\_\_\_\_

Address \_\_\_\_\_ Renewal \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Allow 6-8 weeks for delivery.

Credit Warden No. \_\_\_\_\_

Over 4 million pounds of ready-to-cook venison could be prepared and eaten in many Virginia homes this year. That's a saving, over buying beef, of more than 8 million dollars using an average of \$2.00 a pound for beef!

Besides saving money, venison is far healthier to eat than beef. It has 1/3 less calories. For instance, 1/2 cup deer meat has 120 calories compared to 323 calories for 1/2 cup beef. For the same amount, deer has 1.2 grams of fat, while beef has 28 grams. Deer fat is unsaturated, thus making it low in cholesterol.

Cooked properly, deer is wonderful eating. But unless it reaches the kitchen in prime condition, no magical culinary arts will do much good. There are just two basic rules you need remember for cooking deer:

1. Steaks, chops and liver should be cooked quickly and never past medium-rare.

2. Deer roasts must be cooked slowly and by some steam method similar to those used in preparing beef rump roast. You can use aluminum foil, Dutch ovens, oven cooking bags, crock pots or pressure cookers.

The liver and heart of deer are excellent. They should be placed in a plastic bag as soon as removed from the cavity and then kept on ice. Once home, they should be eaten immediately or frozen. Here are some easy recipes for preparing both.

#### DEER LIVER KABOBS

Deer liver, sliced and cut into cubes of 1 inch by 1 inch

Salt and pepper

Canned whole potatoes, drained

Zucchini, sliced into 1/2 inch pieces

Mushroom caps

1/2 cup melted butter or margarine

Mixed sweet herbs or your favorite herbs

Sprinkle liver cubes with salt and pepper. String cubes on skewer alternately with potatoes, zucchini and mushrooms. Melt butter and then add herbs to this. Place skewers 3 to 5 inches from source of heat and baste frequently with herbed butter while being sure to rotate skewers to insure even cooking. These

# Gourmet Game

## Part III

**Venison is often only as good as the cook.**

by Joan Cone

liver kabobs will take about 10 to 12 minutes to cook, but don't overcook as liver becomes dry and tough with too much cooking. Remember, too, cooking time will vary somewhat depending on the heat of your fire. Allow 1/3 pound of liver per serving.

#### ED'S DEER HEART IN SKILLET

1 deer heart, diced into small pieces

1/2 teaspoon salt

1/4 cup flour

3 tablespoons butter

1 can (8-ounces) mushrooms

1 can (10 3/4-ounces) chicken broth

1 teaspoon instant minced onion

1 teaspoon parsley flakes

Add salt to flour and place in a bag. Shake deer heart pieces in bag until well-coated with flour. Melt butter in a hot skillet and brown deer heart pieces. Add mushrooms and juice, broth, onion and parsley. Cover skillet and simmer for 1 hour. Serve over hot rice. Yields 3 servings.

*A pressure cooker not only insures tender venison stew, but it saves you more energy than even a slow-cooker.*

#### SPICY VENISON STEW UNDER PRESSURE

2 pounds venison stewing meat cut into 1-inch cubes

2 tablespoons oil

1 large onion, sliced

1/2 cup brown sugar

1/2 cup red or rose table wine

1/2 cup water

1/2 teaspoon nutmeg

1/2 teaspoon cinnamon

1/4 teaspoon ginger

Salt to taste

2 bay leaves

Brown meat in oil in pressure cooker. Remove meat and add onion. Saute until transparent. Then return your meat to cooker. Dissolve brown sugar in wine and water with seasonings and bay leaves. Add to stew. Close cover securely and cook at 15 pounds pressure for 20 minutes. Serve over buttered noodles or rice. Serves 4 to 5.

*This recipe using ground venison is easy and will please any gourmet!*

#### VENISON LOAF WELLINGTON

1 egg

1 pound ground venison

1/2 cup seasoned bread stuffing mix

3 tablespoons grated Parmesan cheese

Salt and pepper to taste

Onion powder to taste

1 tablespoon chopped parsley

1 egg

1 tablespoon water

1 package (8) refrigerated crescent rolls

Preheat oven to 350° F. Lightly beat 1 egg in medium-size mixing bowl. add ground venison, stuffing mix, cheese, seasonings and parsley; combine thoroughly. Form into a loaf about 8 x 4 inches and place in a greased, oblong baking dish. Beat remaining egg with water. Separate rolls and lay over top and sides of loaf so that the loaf is completely covered with rolls. Seal edges of rolls with egg-water glaze. brush with remaining glaze and bake 1 hour. Serves 4 to 5.

*Marinated and cooked in an oven cooking bag, any deer roast is turned into a tender treat.*

#### VENISON 'N BEER ROAST

1 package onion soup mix

1 can (12-ounces) beer

1/2 teaspoon salt

3 peppercorns

5-6 pound venison roast

Place large size (14" x 20") Brown-In-Bag in a 2-inch deep roasting pan. Combine onion soup mix, beer, salt and peppercorns in bag and stir with a wooden or plastic spoon to mix. Place roast in bag and close with twist tie. Marinate in refrigerator 3 to 5 hours or overnight; turn roast once. When ready to cook, make 6 half-inch slits in top of bag. Cook in a preheated 350° F. oven for 2 1/2 to 3 hours or until tender. Thicken juices for gravy.

NOTE: A 2 to 3 pound venison roast will take 1 1/2 hours of cooking.





Venison, when made up in something like deer liver kabobs pictured here. (below) makes a low calorie and nutritious meal. Venison loaf Wellington is an imaginative way to enjoy the fruits of your hunt. (center) Venison stew makes a delicious meal. (above)



**The chickadee is one of the most frequent sights in Christmas bird counts. His bright colors and bobbing flight are a sign of the holiday season to many bird lovers.**





# INDEX TO VIRGINIA WILDLIFE

1979, Volume XL, Number 1-12

## BIOGRAPHY

Kathryn Richia — Colaman	Jan..p.26
Gaorga Shumata	Feb..p.18
Shirley Jankins	May.p.18
Diana Higgason — Colaman	Aug..p.26
Linda Cranford — Colaman	Sapt..p.18
Outlaw Gunnar — Badgar	Nov..p.14
Duana Ravar	Dac..p.18
Parsonalities, F.N. Sattarlea	
Otto Kandrick, Feb..p.15; E. Tylar Rasnic, Mar..p.15; Carl Knuth, Apr..p.8; Gary R. Dalton, May..p.15; Rax Hill, Juna..p.15; Joy Turnar, July..p.28; Dr. Gaorga L. Shapard, Sapt..p.22; Richard T. Spain, Oct..p.22; Randall Uhl, Nov..p.22; Charlas Chappall, Dac..p.22	

## BIRDS

Eaglas In Virginia — Abbott	Jan..p.20
Gease of Camaron Station — Ilar	Feb..p.25
Crazy Grousa, Shimmal	Mar..p.20
Birdwatcher Watching — Stauffar	May..p.24
B.W. Tha Taal — Ahrens	Juna..p.6
In Saarch of Falcon — Bagwall	July..p.9
Pal, Tha Chimnay Swift — Ahrens	Aug..p.14
Quoth tha Raven — Jonas	Sapt..p.7
Geasa in tha Piamont — Gooch	Oct..p.8
Bluabird Boostars Wantad — Prica	Oct..p.4
Bird of tha Month, John W. Taylor	Jan. - Nov..p.34
Goldan-Crowned Kinglat, Jan.; White-Throatad Sparrow, Feb.; Harmit Thrush, Mar.; Robin, Apr.; Whimbrel, May; American Kastal, Juna; Yellow Warblar, July; Indigo Bunting, Aug.; Graat-Hornad Owl, Sapt.; Cadar Waxwings, Oct.; Yellow-Rumped Warblar, Nov.	

## ECOLOGY

Saltmarsh Ecology, II — Badgar	Jan..p.24
It Doesn't Hava to Ba a Wastaland — Anderson	Feb..p.4
Saltmarsh Ecology III — Badgar	Apr..p.26
Virginia's Dirty Air — McEwan	Juna..p.12
Endangered Species Updata	Juna..p.24
Saltmarsh Ecology, IV — Badgar	Aug..p.16

## EDITORIALS

H.L. Gillam	Jan. — Dac..p.3
Nonconsumptiva Usa, Jan.; Tha Hunter, Feb.; Tha Cougar, Mar.; Inflation, April; Elitism, May; Fishing Tournamants, Juna; A Non-Hunter Speaks and tha Editor Rapllas, July; Taka Soma Kids Fishing, Aug.; National Hunting and Fishing Day, Sapt.; Operation Respect, Oct.; A Cut Abova, Nov.; Ganatic Spikes and Othar Myths, Dac.	

## FISH AND FISHING

Slob Fisharman — Cochran	Jan..p.7
Fish on Whaals — Smith and Stainkoenig	Jan..p.16
All Saason Trout — Crisp	Feb..p.21
School's End — Bays	Mar..p.7
Smith River Browns — Prillaman	Mar..p.16
Smith Mountain Stripars — Almy	April..p.20
Southwest Trout — Ebart and Sadowski	April..p.4
1979 Trout Stocking Plan	April..p.15
Blua Gill — Weekas	May..p.7
Nativa Trout — Banglay	Juna..p.4
Fly for a Summar's day — Eastby	July..p.20
Rappahannock Largemouths — Pana	July..p.4
Try Tarrastrials — Almy	Aug..p.9
Combination for Summar Bass — McDonald	Aug..p.20
Military Watars — Almy	Sapt..p.25
Sculpins — Bugas	Sapt..p.4
Brook Trout — Evans	Sapt..p.14
Rock Bass — Gooch	Oct..p.11
Roanoka Bass — Patrimoulix and Jankins	Nov..p.4
Bafora tha Hook — Fischar	Dac..p.7
Wallaya In Virginia — Sladd	Dac..p.16

## HOW TO

Tackla Box Maintenance — Whita	Feb..p.33
Liva with Wildlifa — Gray	Mar..p.9
Virginia Shad — Cona	April..p.25
Natura Crafts — Lindsey	May..p.9
Training Your Dog — Bays	July..p.14
Wild Cherry Jaily — Massalin	Aug..p.32
Scouting for Whitetails — Rhodes	Sapt..p.20
Gourmat Gama, Gama Birds — Cona	Oct..p.26
Gourmat Gama, Quail and Grousa — Cona	Nov..p.27

Gourmat Gama, Vanison — Cona	Dac..p.32
Christmas Crafts — Prica	Dac..p.20

## HUNTING

Hunting with Sam — Bays	Jan..p.4
Ba Praparad — Colvin	Jan..p.33
Thanks to February — Murray	Feb..p.13
To tha Hounds — Gildaa	Mar..p.27
Turkey Calls and Turkey Hunters — Shaphard	April..p.13
Diary of Spring Gobbler — Colvin	May..p.16
Hunting Eastern Woodchuck — Colvin	July..p.12
Hunt Closa — Bays	Sapt..p.8
Early Duck Saason — Hicks	Oct..p.28
Staal Shot — Pratts	Oct..p.14
I Kaap Hoping — Thomas	Oct..p.24
Turkey on tha Wing — Almy	Nov..p.20
Stratch Your Saason — Gooch	Nov..p.12
Back Bay Ducks — Almy	Dac..p.10
Cold Duck Gats Buck — Bolton	Dac..p.4

## LOCALES

Zapp's Goosa Stop — Dannan	Mar..p.24
Saltmarsh and Sand — Hammack	Mar..p.12
Wildarnass Rivar — Murray	April..p.9
Stona Mountain — Anderson	May..p.10
Phalps WMA — Kugler	Juna..p.18
Cantral Blua Ridga, Gaology — Hannankrat	July..p.17
Cantral Blua Ridga, Flora — Hannankrat	Sapt..p.10
Jackson Rivar Farawall — Gooch	Dac..p.14

## MISCELLANEOUS

Lowly Lichan — Dacker	Jan..p.13
Open Housa for Raccoons — Elkins	Feb..p.6
Groundhog on Waathar — Linford	Feb..p.8
Canina Capars — Prica	Feb..p.16
Phantom of Rivar Band — Goodwin	Mar..p.14
Virginia's Indians — Bowyar	April..p.6
Snake-opoly — Beard	May..p.20
VWF Camp — Wisaman	Juna..p.26
Snakabita — Traistar	Aug..p.12
Ma and My Knifa — Russell	Oct..p.6
Gators in Virginia — Bonavita	Nov..p.10
Spaaking of Deer — Paarca	Nov..p.7
Budgat Crisis — Randolph	Dac..p.8

## OUTDOORS IN GENERAL

Rivars of Buffalo Pasturas — Bratton	Jan..p.8
Rad Alart — Artas	Juna..p.20
Camping on Your Own — Boona	Juna..p.16
Back to tha Thraa B's — Traistar	July..p.6
Boating Accidents — Karrick	Sapt..p.6
Exploring tha Dapths — Gaston	Oct..p.16
Air Boat on tha Jamas — Gooch	Nov..p.25

## PHOTOGRAPHY

Rural America — Kugler	Jan..p.18
Signs of Spring — Hammack	Mar..p.17
Appalachian Spring — Bratton and Prica	April..p.17
Gama Wardan Photographer — Parry	Juna..p.9
Sarangatti on Shanandoah — Slaughtar	July..p.25
Autumn Empira — Coolay	Nov..p.17
Imprassions of Assateagua — Daans	Dac..p.26

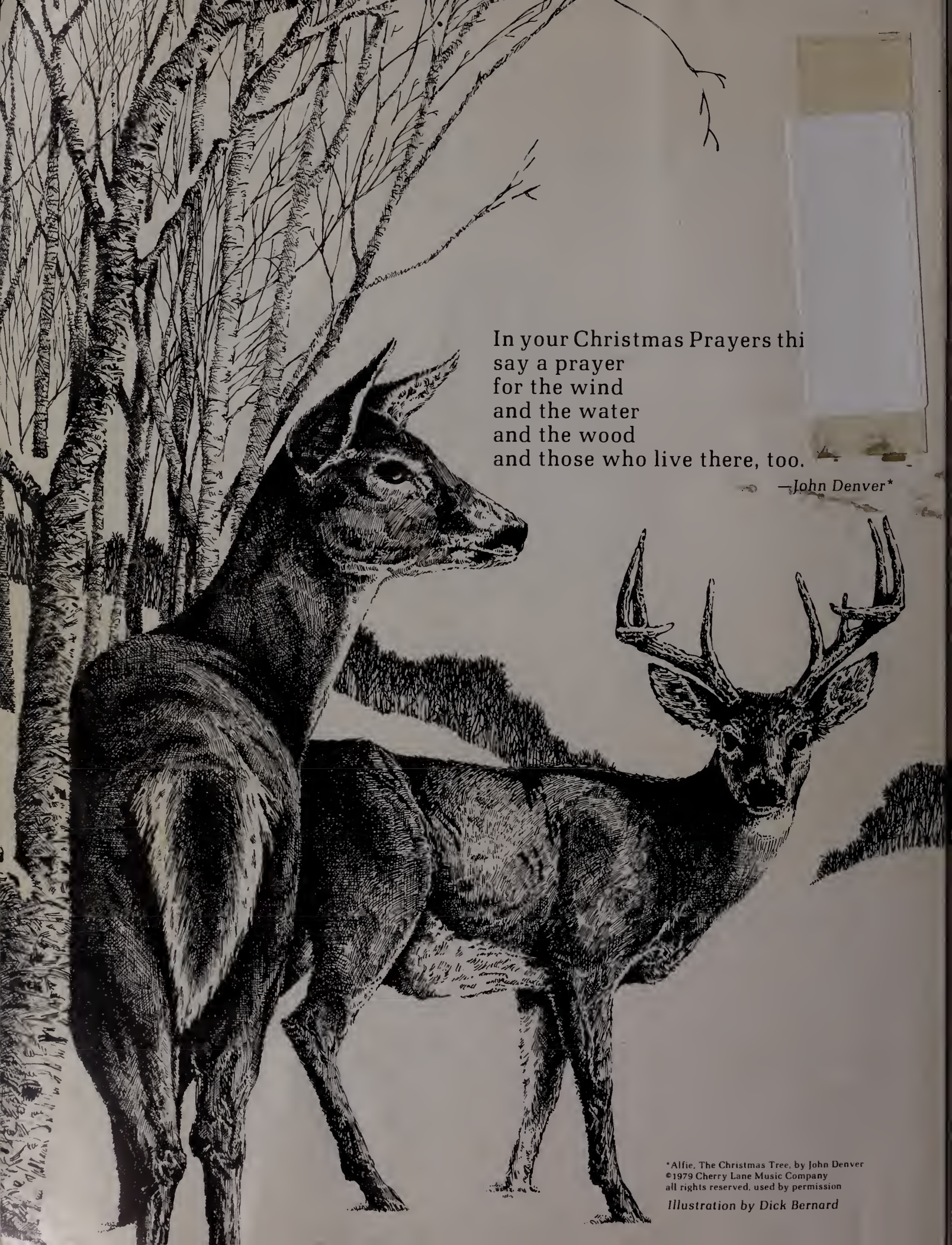
## PLANTS

Amarican Chastnut — Prica	May..p.26
In Naturas' Gardan, Elizabeth Murray	
Callad Aftar, Mar..p.33; Arums, April, p.33; Sassafra, May, p.33; Campanulas, Juna, p.33; Coral Honaysuckla, July, p.33; Roadside Waads, Aug., p.24; Why Ba Rad?, Oct., p.33; Evaning Primrosa, Nov., p.33; Hollias, Dac., p.33.	

## RESEARCH

When tha Wind Blows — Francis and Gilas	Feb..p.10
Natura and Power — Hartwick	May..p.3
Channalization Controversy — Lochmillar, Maunay, Whaalan	May..p.13
Do Hunters Raspect Law? — Baattia	Aug..p.4
Hava Ragulations Saved tha Turkey — Waavar	Aug..p.7
Clapper Rails and Tidas — Coggin	Sapt..p.16
Wildlifa Toxicology	Sapt..p.32
Big Gama Statistics	Sapt..p.13
Ara You a Dafansiva Hunter? — Bromlay and Karrick	Oct..p.20





In your Christmas Prayers thi  
say a prayer  
for the wind  
and the water  
and the wood  
and those who live there, too.

—John Denver\*

\*Alfie, The Christmas Tree, by John Denver  
©1979 Cherry Lane Music Company  
all rights reserved, used by permission

Illustration by Dick Bernard